



DEVOTED TO NAVIGATION, COMMERCE, ENGINEERING AND SCIENCE.

VOL. X No. 41.

CLEVELAND, O., OCTOBER 18 1888.

\$2.00 PER ANNUM
SINGLE COPIES 5 CENTS

AROUND THE LAKES.

CLEVELAND.

Mr. Hock, a Mississippi river pilot of forty years experience, was in the city this week.

D. Nicholson has executed a fine painting of the propeller E. P. Wilbur, for Mr. Pankhurst.

The Cleveland Shipbuilding Co. are building a steam hammer for a firm at Paterson, New Jersey.

The Globe Iron Works company has patented and put up a new steam windlass which they consider one of the best extant.

Mr. Diebold a relative of Captain Brown, was a passenger on board, and George Simpson adjusted her compasses on the passage up.

It is expected that the fourth Manitoba boat will leave the yard of the Globe Iron Works company before navigation closes.

Upson, Walton & Co., are fitting her out.

Messrs. Quayles Sons, while they are not yet ready to give any details, will soon put a keel down for a steamer to be about the dimensions of the Samuel Mather.

The Globe Iron Works Co. will launch the Northern Belle on or about November 1, this steamer is No 4 of the northern line of steel steamers, all built by the same builders.

Captain William J. Harlow, of the schooner Frank C. Leighton, was in the city this week and favored us with a call. The captain seems quite satisfied with his season's work.

The new Trout wheel recently placed on the steambarge Cormorant, at Cleveland, gives excellent satisfaction and we are credibly informed that both her speed and towing qualities are greatly improved.

The fine tug Crusader, Captain Charles Swartwood, came into the river yesterday with the Norris, Baker, Nellie Radington and Red White and Blue. The Crusader will wait for the same tow up.

The Globe Iron works have their new yard in shape and four line boats will be built for the Lehigh line, and three more for the Northern line, then the second Lehigh line boat will be built.

About the 1st of December they will move their offices on the corner of Spruce and Elm streets. The old offices will be torn down and a new travelling crane will be put up, and an erecting shop built.

Captain C. W. Lockwood, late of the schooner M. E. Tremble, will accompany Mr. John Duffy east this fall for the purpose of purchasing a vessel, which the captain will bring back to the lakes.

The J. C. Kershaw, recently purchased by a syndicate of Cleveland gentlemen, while bound down with a cargo of grain for Buffalo, ran on Grosbeak point shoal on Tuesday night. The ferry Excelsior went to her assistance.

Advices received by Manager Bartlett Tuesday say that the Standard oil docks at Duluth were burning. The telegram did not contain particulars of the stock on the docks. The Corona with her oil cargo had not arrived there.

The new Northern line steamboat Northern King got away from this port about 10 o'clock p. m. Saturday, coal laden. Captain Charles Brown is in command, Joseph Edgcomb mate, O. R. Morse second mate, Mr. Whitney engineer. Captain Murch considers this one of the finest steamboats ever turned out by any shipyard.

We are sorry to announce that Mr. J. Norris Smith, a well known business man of Cleveland, has passed away. Mr. Smith belonged to a family of mariners and was, himself, much interested in marine affairs. He had recently purchased a yacht, with the intention of taking his family for a cruise around the gulf ports, but Yellow Jack laid him low at Jacksonville, Florida.

The injured propeller North Wind is to be given a small cargo of iron ore and sent down to this port for repairs. Captain Stoddard of the Northern Light says that the diver who examined her bottom at the

Sault reported that he could get his diving helmet up through the hole made in her hull by the rocks. But the water bottom held and kept the water out.

Captain Murch superintendent of construction for the Northern line of steamboats, being built at the Globe Iron Works Co., considers the Providence steam windlass manufactured by the American Ship Windlass Co. the best machine that can be adopted for the handling of lines and hawsers, that ever was placed on board of a vessel.

By our report from Commissioner of Navigation Morten, the steamer George H. Dyer, launched at Milwaukee recently registers 1372.18 gross, and 1086.30 net tons; the steamer Majestic launched at Buffalo 2073.51 gross and 1657.81 net tons. This according to the same authority is far greater than the new tonnage in the entire United States trade.

It was noted in these columns last week that Clevelanders were going to the seaboard to purchase a schooner for use on the lakes. It now transpires that a gentleman from Boston is in the field in Cleveland and is figuring with the Cleveland Drydock Co. for a schooner about the size of the Fayette Brown for the coasting trade on the Atlantic. It is possible that a contract will be closed next week.

Captain Thomas Wilson and others have just returned from Philadelphia, where they have been looking after American interests relative to the price of damp and dried ores, export and import. The case came before Judge Cadwalader and was ably presented by both sides but Captain Wilson informs us that the dampness in ore will not be detrimental to price or sale. Therefore score one for the lakes.

Reports from Cleveland's new drydock are that good progress is being made on toward completion with scarce a doubt that it will be finished by December 1. Cleveland will then have a drydock which will accommodate anything on the lakes, including such vessels as the Sauguehanna, which had trouble to find a place for repairs during the past week. Excavations are practically completed, piles driven, a considerable amount of timber in place, and the work of planking some parts of the dock will be begun this week.

At the Cleveland drydock they have had the tug Gordon in, for tightening wheel, tug Page for fixing rudder and straightening her shoe, the schooner H. H. Brown had her batts calked, leak stopped and bottom searched up. Schooner S. H. Kimball docked Tuesday to have a leak stopped. The propeller North Wind will reach here tomorrow from Detroit, and go in drydock for repairs to her bottom. James Hays went up to Detroit last Sunday morning, on the Northern King, this portion of her maiden trip was accomplished successfully, and Mr. Hays was fired ashore at Detroit on a clothes line.

Mr. Radcliffe is known to be a man of ripe years and much wisdom met a friend in New York, after his return, the sequel of which was that the new found friend gained the money and Mr. Radcliffe gained the experience. As regards Mr. Pankhurst he has come back to us loaded down with an elegant mixture of cosmopolitan dialect, and we presume it will be some length of time before even his many intimate friends will be able to discover to which nationality he has the most kindly leaning, be this as it may, we notice personally a decided general improvement in Mr. Pankhurst's bearing due to a certain extent perhaps, to the charming polish recently witnessed at the French capital.

The Cleveland Shipbuilding Co. will probably launch the new Michigan Central ferry steamer Transfer on Wednesday, the 24th. The guards have been fitted on and removed. After launching she will drop down below the Central street bridge where they will be replaced on the starboard side and afterwards she will be turned around and the port guards will be fitted in place.

The boilers are placed and connected, and the machinery is ready to go in as soon as she gets afloat. The fine steamer will have a roadway for three tracks, each accommodating seven cars. The blocks are laid for one of the new steel steamboats to be built for the Cleveland Iron Mining Co., and the keel just arrived from Newburg today and will be laid at once.

During the travels of the Cleveland Shipbuilders on foreign shores, it was discovered that Mr. Jackson was the only linguist in the party, he being able to translate into U. States every tongue that the parties ran across provided he was given time enough. The Quayle Bros, after separating from Mr. Jackson always insisted on riding back to the stations which they had left the previous day because they could not make the conductor on the train understand where they desired to go, but after showing their tickets they would be put off at wayside stations on almost every occasion.

Meteorological summary for the week ending October 16, 1888:

Mean actual barometer.....	29.89
Mean temperature.....	45.6
Mean humidity.....	74.1
Total precipitation.....	.80
Prevailing direction of wind.....	S. E.
Total wind movement.....	1218
Av. cloudiness.....	7.3
Av. state of weather.....	Cloudy
Max. temperature, highest.....	60.5
Max. temperature, lowest.....	31.0
W. H. HAMMON, Sgt. Signal Corps, U. S. A.	

PORT HURON.

The schooner F. B. Gardner has been in Dunford & Alverson's drydock for the past week repairing the damages received in the recent gale on Lake Huron. She is now taking on her load of lumber and will continue her voyage.

The schooner S. L. Watson has been here at Dunford & Alverson's drydock receiving a new foremast and other minor repairs.

The tug Kittie Smoke is now ready for business. She has been receiving a general overhauling at Dunford & Alverson's drydock.

The propeller Osceola has been placed in the Wolverine drydock. She is being rebuilt and will be a first-class boat when done.

Ed. J. Kendall, the marine reporter, has purchased the schooner F. H. Orion and will use her as a lighter in the future. Any one wishing any lightering done will be accommodated on short notice.

The tow barge Sonora is in Dunford & Alverson's drydock receiving general repairs.

The propeller Westford broke her eccentric when on her up trip last Thursday.

The schooner Nassau has been receiving new head gear at the drydock.

The schooner John Sheutte is aground in the bay opposite this city. Tugs are working on her.

The S. L. Watson got aground near the drydock and had considerable difficulty in getting off.

The Light ship on Stag island was dragged considerably below the stake by the logs which broke loose from the Gettysburg's raft. It was soon placed in position by the tug Cheney.

The schooner Heather Belle is here receiving general repairs and calking.

The Ferry Dormer has at last been condemned. She is about to go into the drydock. She will be rebuilt and will receive a new steel boiler.

Love & Scofield, the boiler makers, are building a pleasure yacht for themselves; dimensions on length 28 feet, beam 5 feet 8 inches, depth 3 feet. She will have a Scotch boiler 34 by 44 inches, with 150 pounds of steam; engine 5 by 5, with a speed of 15 to 18 miles per hour; her hull will be entirely of steel.

The tug A. J. Wright will be at Port Huron with a full wrecking outfit on board. Kendall, the marine reporter, acts as agent for her.

CHICAGO.

Special correspondent to the Marine Record.

The Goodrich Steamboat Co.'s steamer Chicago, and Captain David Dall's schooner Lincoln Dall collided near the mouth of the river Thursday night, the Chicago was going out and the Lincoln Dall sailing in, intending to tie up at a dock near the life saving station. The Chicago received considerable damage to her port rail, upper cabin and wheel house, and the Lincoln Dall had her jibboom and head gear carried away.

The steamship R. P. Flower met with considerable bad luck last week; she struck on the bottom of the river in the draw of the Fort Wayne railroad bridge Friday morning for several hours, and when proceeding down the river in tow of 3 tugs, she collided with the steamship Nebraska, laying at the Rock Island elevator, carrying away two of the latter's stanchions and some rail. She took the jibboom out of the schooner Rouse Simmons, lying outside of two other vessels at the Air Line elevator, and collided with a scow near the mouth of the river, doing considerable damage. On Saturday she returned to this port for repairs to her steering gear which had broken down.

At the Chicago Drydock Co.'s the steambarge Nellie Torment was in dock for a new stern bearing, the propeller City of Traverse for a new sho etc., the schooner Nariad to have a leak stopped, the steamer Lawrence to have her wheel fastened, the schooner Wolverine for bottom calking. Schooners Adirondack and John Baber received new center boards, Evra Fuller new main gaff, Colonel Ellsworth a new rudder, stock, J. N. Foster, Mary E. Cook, barge Ironton and tug D. L. Babcock received repairs.

The Bay City steamer building for the Fitzgerald Egan-Armour syndicates will be 265 feet keel, forty feet beam, and twenty-three feet molded depth. The Detroit steamer for the same syndicate will have the same dimensions with the exception of five feet less keel. Both boats will have triple expansion engines.

The Lehigh Valley Co.'s steamer R. A. Packer, with coal consigned to J. L. Hathaway's coal yard, above Clybourne avenue, found the bottom and got stuck in the draw of Clybourne avenue bridge, Monday afternoon, and remained until Tuesday, when a portion of her cargo was taken off on lighters. The Lehigh Valley Co. will endeavor to make Mr. Hathaway pay for extra tug expenses and damages, he having insisted on the Packer being sent to that coal dock, after her captain had protested against, her being sent there, knowing full well that she was drawing too much water to enable her to get to the coal dock without trouble and damages.

At Miller Bros. shipyard the schooner City of Sheboygan, Radical and Ralph Campbell and steambarge C. J. Kershaw were in dock to have leaks stopped, the schooners North Cape, M. W. Page and tug Pearl Campbell had their bottoms calked, the steambarge Wm. Edwards for a new shoe which was supplied by Donaldson Bros., shipsmiths. The steamship W. A. Haskell had her wheel tightened up, the schooner Lake Forest received a new piece of keel, the schooners Cascade a new fire-foot and piece of new keel, Rouse Simmons and S. A. Wood, new jibbooms, the schooner Cuba a new center board, the steambarge A. R. Colburne was at the derrick and had her mast taken out and received a new one, the tug A. B. Ward had a line taken out of her wheels.

Miller Bros. intend during the winter to enlarge their No 3 drydock by lengthening it 100 feet, which will make it 330 feet long, and will enable them to dock the largest vessels on the lakes, and oftentimes to place two vessels in one dock.

The Chicago Board of Marine Underwriters have advanced trip rates on grain to the following figures: From Chicago to ports on Lake Michigan 50 cents; to ports on Lake Superior \$1; to ports on Lake

Huron, Sarnia, and Detroit river, 80 cents; to Georgian Bay ports, 90 cents; to Lake Ontario ports, \$1.10; to Ogdensburg, \$1.10; to Montreal, \$3.50.

Formidable competition as a grain carrier to New England ports from Chicago as against Ogdensburg by the Grand Trunk lines has sprung up. The new route is via Buffalo and the Erie canal to Rotterdam Junction, 22 miles west of Troy. From this point grain is shipped on the Fitchburg railroad to Boston and New-England points. The route was but recently established, but is now in full operation. Beckwith & Fleming the Lehigh Valley people, are behind the scheme in this city.

The Goodrich Steamboat Co.'s steamer Corona has been laid up at Manitowoc. The steamer City of Ludington will take her place.

BUFFALO.

Captain McLeod, of Smith & Davis, left for French river to release the steamer Kincardine, sunk, lumber laden.

One of the crew of the burned propeller St. Joseph was here last week. He states that nobody knows how the fire originated, except that it was from the furnace. Before the hose could be turned on it the heat was so great that the engineer could not reach the pony engine to put it in operation and there was nothing to do but beach her. She is insured for \$10,000; according to some statements, for twice that amount. No examination has been made of her, but part of the crew is watching her. This seems to be necessary for the pirates alongshore tore down her foresail to make off with it while the crew were ashore to escape the fire. The boat's stern is in about thirty feet of water.

A syndicate of capitalists, comprising Messrs. John Kelderhouse, Thomas Maytham, M. M. Drake, Berriman Brothers, H. G. Trout, James Gibson and others have closed a contract with the Union Dry-dock Company for the construction of a steel steamer, capacity 2,500 tons, to be out next spring. Keel 200 feet, beam 40 feet, hold 23 feet, fore and aft compound engine by Trout; two steel boilers by Lake Erie Works, which takes an interest in the boat. Captain James Gibson, of the Lackawanna, will sail her.

Most 400 wheels were made in 1888 at the King iron works.

The seaman's union at Buffalo yesterday made wages at three dollars a day, an advance of fifty cents.

At the instance of the Lehigh Valley transportation company the grand jury in the court of sessions indicted Elevator Manager Wells for overcharging in receiving and delivering the corn cargo of the propeller Oceanica last month, according to the elevator law, which went into effect on June 11 last. The law allows 3 cents for elevating, weighing, and transferring grain, but says nothing about storage. The only other expense shall be the actual cost of shoveling to the leg of the elevator. All elevators have right a long charged 3 cents whether the grain was transferred or stored ten days. Steamers pay \$4.50, of which \$2.25 go to the scoopers and \$1.75 to the elevator for the use of a steam shovel. The Lehigh Valley people claim that 3 cents is an overcharge of 1 cent, and that the actual cost of shoveling is only \$2.25 per 1,000 bushels. It is understood that this is to be a test case and that the elevating association will contend that the law is unconstitutional.

SAND BEACH.

Special to the Marine Record.

The following steamers and vessels took refuge in the harbor during the 11th inst.: Fessenden, Mollie Spencer, R. G. Stewart, tug Constitution; 12th, steamer George L. Colwell and two, Peter Smith, Araxes and two, schooners J. R. Noyes, Harriet Ross; 13th, R. C. Brittain, City of Concord and one, Glasgow and four, John Pridgeon, Jr., Oneida and one, Abercorn and three, Cleveland and two, Messenger and two J. P. Clark and three, Ramona, W. D. Cushing and three, schooner Gold Hunter.

One day last week an officer of the life saving service department was in town conducting an investigation in regard to the loss of life of the crew of the barge St. Clair. It is not known whether the crew here are censured or not.

MARITIME LAW.

IN RE-PETITION OF THE CONTINENTAL INSURANCE COMPANY OF THE CITY OF NEW YORK, TO LIMIT ITS LIABILITY UNDER THE 18TH SECTION OF ACT OF CONGRESS, 1884, CH. 121 EX RE. CREDITORS THE SCHOONER ELGIN—DECREED THAT THE UNDERWRITERS MAY LIMIT.

District Court of the United States, for the Northern District of Illinois.
Statement and Argument on Behalf of Petitioner.

ROBERT RAE, JAS. C. MC-HANE, Proctors for petitioner.

In the spring of 1885, the hull of the Canadian schooner Elgin, valued at \$8,000, was underwritten for her owners Ackerson and Lawson, under lake form of hull policy, by the Anglo-American Insurance company of the District of Columbia, for the season of navigation of 1885, in the sum of \$2,500, and in the Continental Insurance company of the city of New York in the sum of \$1,500, insurance limited, however, in the latter company's policy "against total loss and general average only," leaving a one third interest uninsured of \$2,000.

The policies were in usual form of lake marine policies on hulls. There was also a risk on cargo in open policy for \$1,500 written by the British American Assurance company.

While these policies were in force the schooner Elgin, in command of Lawson, part owner, on the second day of August, 1885, while bound on a voyage to Chicago, loaded with 6,487 pieces of ties, at a freight of six and a half cents a piece, was, by the violence of the winds and waves, driven on the west shore of Lake Michigan, about four miles north of Racine point.

The master of the vessel, on the third day of August, was able to get ashore and visit Chicago, and there reported to Richard Rispin, an insurance agent, whose partner at the time was the agent of the Continental Insurance company.

There is a well established custom on the lakes, in cases of marine disaster in which underwriters are interested, for the master or his servants to give notice to the underwriter having the majority of interest, whose business it was, upon receiving such notice, to take charge of the interest of all the underwriters. In pursuance of this custom, Rispin at once wired J. P. Orr, general agent of the Anglo-American Insurance company at Buffalo, under date of August 4, "that the schooner Elgin was ashore near Racine. Captain at Chicago, and the Anglo-American had \$2,500, and 'wants to know if Rispin shall send a man 'to take care of the company's interest.'"

A like telegram from like party to like party was sent, informing Orr that the tug Morford, steam pump and hawser were ready to go. "Shall I send her to the Elgin?"

Orr replied to this on like date as follows: "We shall sustain the captain in his efforts 'to get the vessel; you send good man to 'help him and protect the company's interest. I don't want the company to become 'responsible for the bills, preferring that 'the captain should do so, and we contribute.'"

Rispiu, acting under these instructions, employed a wrecking master, John Prindville, jr., who however, was not in the employ of any particular company, or of the Continental Insurance company. He, with the master, at once commenced to look after the wreck. The tug T. T. Morford, whereof J. W. Dunham's T. & W. company was the owner, was on the fifth day of August employed by the master to go to the assistance of the schooner. She started on that day and remained by the schooner some nine days, her bill amounting to \$2,687.40. Prior to this, on the 3d of August, Frederick Knapp and others had been employed by the master, and on the next day by the wrecking master and the master. The tug Sill, whereof Knapp & Gillem were the owners, was employed to lighter and handle the cargo, and the services of this tug, and of men employed in her assistance to handle the cargo, amounted to \$1,188.14. Afterwards, commencing after August 7th, other bills were contracted, the whole amounting to \$9,806.36. On the 7th of August, while the vessel was still on the beach and these the salvors were at work, the master, who was also part owner, abandoned, in writing, the vessel to her underwriters.

The general average charges, which the vessel was assessed to pay, amounted to \$4,404.91, and stated as follows:

Vessels Pro. G. Av. charges.....	\$4,404.91
The adjuster apportions this:	
Anglo-American, \$2,500 pays.....	\$1,835.38
Continental, 1,500 ".....	1,101.23
Owners uninsured	
Interest, 2,000 ".....	1,468.30
The cargo was assessed.....	\$4,404.91
The freight ".....	1,920.50
	312.24
	\$6,637.65
The particular average.....	3,168.91
Total loss.....	\$9,806.36

The vessel was brought into the port of Chicago, on the evening of the 13th of August, 1885, in a disabled condition, in charge of two tugs, with a steam pump and with a small portion of her cargo aboard of her, amounting to but about 1,880 pieces out of the total of 6,487.

The schooner J. B. Newlands, delivering the balance of the cargo, amounting to 5,107 pieces.

When the vessel arrived at the port of Chicago, the expenses put upon it at that time amounted to somewhere about \$7,575, and what her value then was, it is impossible to say. Afterwards, Miller Brothers took her onto their drydock, and under the instructions of the master and of John Prindville, the local agent of the Continental Insurance company, repairs were put upon her of \$2,221.92. For these repairs the schooner was libeled and sold by the marshal at public auction, under the decree of this court, for the sum of \$1,225, to J. W. Dunham, of the Dunham T. & W. Co.; the purchase money paid into the registry of this court, and paid out to all those opposing this petition, upon their several intervening libels against these proceeds.

Prior to this, on the 5th day of December, 1885, Dunham T. & W. company sued out a foreign attachment in the superior court of Cook county, against the late owners, Ackerson and Lawson, upon an affidavit setting forth that they through the master of the vessel engaged it to render these services, and it obtained judgment without personal services for the full amount of its bill, and garnished the Anglo-American and the Continental Insurance companies, as debtors of the judgment defendants.

The answer of these consignees to the garnishee is very non-committal. Their duty was to protect, if they honestly could, their customer, and they simply contented themselves with answering after protesting against the exorbitancy of the bills, that they owed in general average to whoever was entitled to receive it, their respective proportions of the whole of the expenses incurred, for the benefit of the schooner Elgin.

Dunham's attachment looked as if it would enable his corporation to gobble up the whole amount of the general average charges, due by these underwriters, leaving the other creditors, these opponents, equally meritorious as Dunham, wholly unprotected. To secure equality among them, the underwriters, under the 11th section of the Garnishment Act, Ch. 62, Rev. Stat. 1225, [Star and C. edition,] the salvors were all cited to appear and receive their proportion of the general average charges admitted to be due with this qualification, however, that the bills of the salvors were vastly exaggerated and unreasonable.

The Anglo-American Insurance company, having failed and become insolvent before answer filed by these salvors, they at once determined that the only way to get the full amount of their bill was by attempting to charge the whole of it to the Continental Insurance company, who was financially responsible. They, therefore, determined to answer the citation by disclaiming any interest in the general average charges, or of any interest in any particular fund, and asserting that the Continental Insurance company employed them, and as such was liable to the full amount of their respective bills, and that they had also a lien to secure them on the schooner Elgin. They at once filed their libels against the Continental Insurance company, claiming that it was liable to the full extent of their respective bills.

After this they took no steps to collect the general average charges. These charges stood as follows:

Anglo-American.....	\$1,835.38
Continental.....	1,101.23
Owners.....	1,468.30
Freight.....	312.24
Cargo.....	1,920.50
	\$6,637.65

These opposing creditors insisted that they had no interest in any particular fund, and they then did and now do, assert that they look to the Continental Insurance company for whatever deficit there is after exhausting the proceeds of the sale of the schooner to satisfy in full their respective claims. This disclaimer filed in the case of Dunham T. & W. company's attachment suit, entitled it to a judgment for these general average charges, and to that extent it had been satisfied.

The position of the salvors was a complete surprise to the counsel of the Continental. When the salvors asserted, stimulated by the failure of the Anglo-American Insurance company, that they looked to the Continental Insurance company for the whole of their bills, and that they would have nothing to do with the general average charges, the position was so novel, so unjust, so contrary to the settled practice of adjusting these kinds of claims, and so fraught with danger to the Continental Insurance company, that its counsel became alarmed lest his client on an insurance of \$1,500 would by an ingenious device, if successful, be mulcted in a sum of little less than \$10,000.

The court can well imagine the solicitude with which the counsel for the petitioner would feel, that all should be saved that could be saved, and all should be done that could be done to avert so grave a catastrophe. It became of the first importance that the salvors should be induced to accept whatever could be recovered of the \$1,920

CORRUGATED FLUES FOR BOILER FURNACES.

ALL SIZES

AND WITH FLANGED

OR PLANE

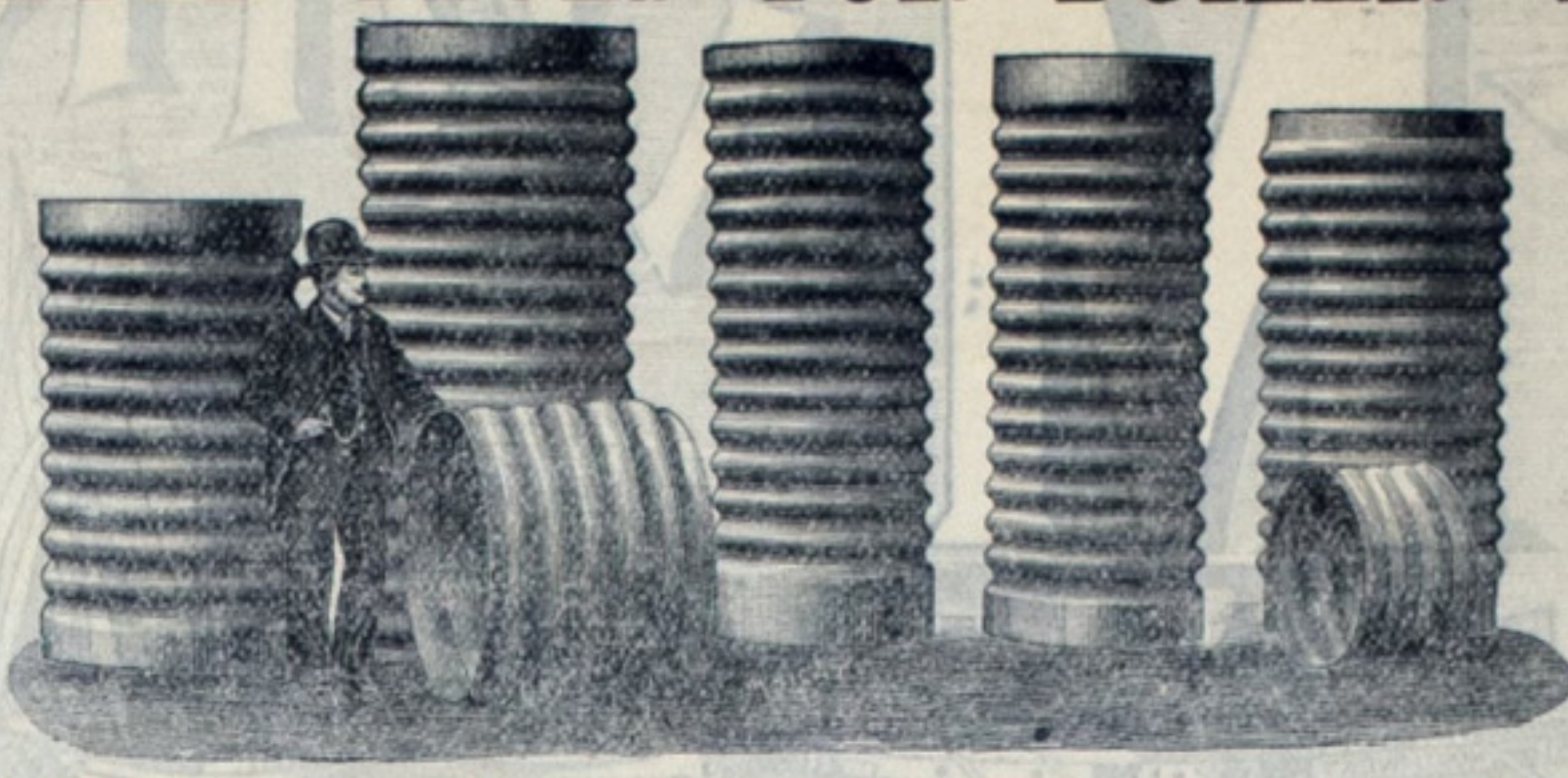
ENDS.

Take 10 ft or 23

Street Ferries

from NEW YORK

to GREENPOINT



Manufactured

SOLELY IN THE

UNITED STATES

UNDER OUR OWN PATENTS

AND THOSE OF

Samson Fox,

OF

Leeds, England.

THE CONTINENTAL IRON WORKS,

BROOKLYN, NEW YORK.

THE NEW YORK BELTING AND PACKING COMPANY.

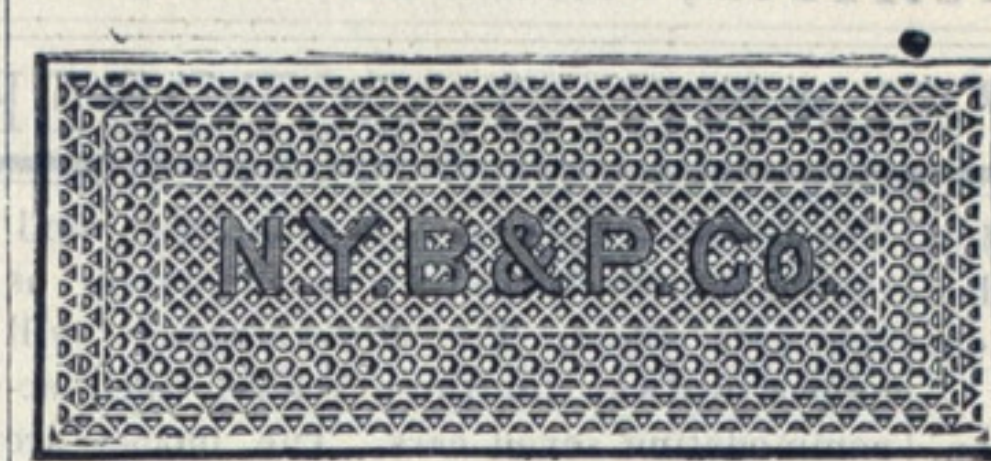
Vulcanized Rubber Packing of Every Description.

RUBBER MATS AND STAIR-TREADS

For Halls, Floors, Decks and Companionways.

Rubber Belting, Packing and Hose.

FIRE TEST HOSE FOR STEAMBOATS & TUGS.



PERFORATED MAT.

JOHN H. CHEEVER Treas.

J. D. CHEEVER, Dept. Treas.

No. 308 Chestnut St., Phila.

203 Nicollet Ave, Minneapolis.

Post & Co, Cincinnati, O.

151 Lake St., Chicago.

52 & 54 Summer St. Boston.

Cor Wazee and 17th Sts., Denver, Colorado.

European Branch—Pickhuben 5, Hamburg (Freihafengebiet), Germany.

WAREHOUSE: 15 PARK ROW, NEW YORK.

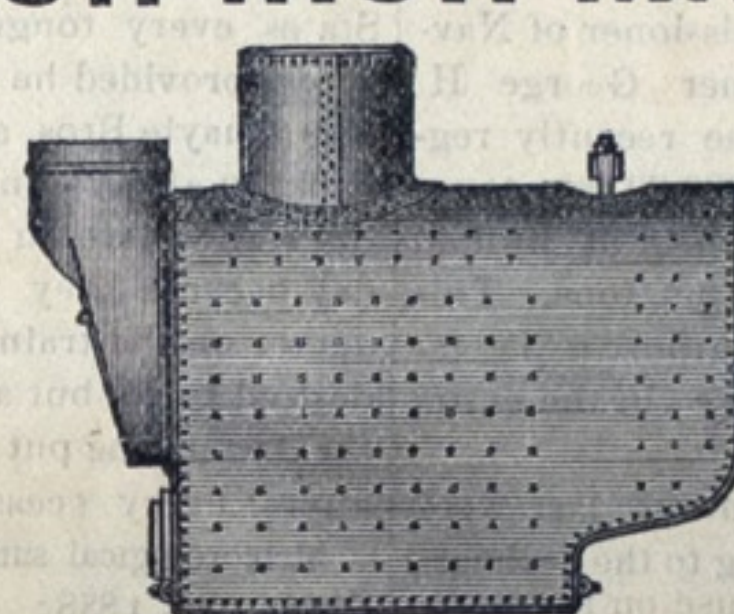
STEEL OR IRON MARINE BOILERS

OF SUPERIOR

CONSTRUCTION

A SPECIALTY.

MADE IN



ALL STYLES and SIZES

OF EITHER STEEL OR IRON,

HYDRAULIC RIVETED:

SPECIALLY ADAPTED FOR LAKE USE.

LIDGERWOOD M'G. CO., 96 Liberty-st., New York.

WORKS: SOUTH BROOKLYN,

assessed on the cargo, and due from its consignees. The Continental had no right to gather up this sum. The salvors alone were entitled to it, nor would it be safe for the Continental Insurance company to have paid this amount over to the salvors, if they could have been induced to receive it, and have attempted by virtue of the payment to have collected it of the consignees. This was painfully apparent when the counsel for the salvors and consignees declined to go with the counsel for the underwriters and with one of the libelants, Mr. Knapp, and collect this \$1,920, or so much of it as could be collected. It was plain to be seen that the salvors would have naught to do with it, and it was easy to realize that their programme was to compel the Continental Insurance company to pay the whole amount of the bills and when it sought to collect of the consignees of the cargo, their contributory share, it would be met with the able assistance of their counsel, now counsel for the creditors; that the consignees were not liable and that charges of \$1,920 on lumber of the value of \$1,200, was palpably extortionate and wholly inadmissible. The Julia Blake, 107 U. S., 481.

The British American Assurance company were the underwriters on this cargo, and as such would ultimately have to pay whatever was justly due in general average charges on cargo. By the terms of its policy it would not be liable unless suit was brought against it within a year from the date of the loss. The year would expire on the 3d of August, 1886, and unless something was done at once by the salvors to collect this sum, it would likely be lost to all. The Continental Insurance company had no claim on it, and therefore could maintain no suit; the fund belonged to the salvors, and they alone could sue. The British American Assurance company, three days before the year would expire, in which suit could be brought against it, on the 31st of July, 1886, paid into the hands of their own counsel, and not the counsel of the salvors or the counsel of the Continental Insurance company, the sum of \$1,400.

This money was paid him with which to settle these salvage charges, he first deducting his own fee for so doing out of the deposited fund; and as such bailee, he must be held to hold it, whenever those entitled to receive it may make up their minds that they no longer look to the Continental Insurance Co. for their entire claim. So far no demand or claim have even been made by the salvors on any one for this fund. It is said that the counsel of the British American Assurance Co. was also counsel at the time of the receipt of the money of the Con-

tinental Insurance Co., and therefore he was not in a position to act as counsel for the British American. Certainly this is not so as to strangers, such as these creditors are, and if it were so as to the Continental Insurance Co., it is conduct of which it only could complain. It, however, does not complain, and approves of record counsel's conduct, and makes no claim to the fund and had certainly no right to make any such unless it had first paid the salvors the amount due on cargo, and then only in equity, and it is pretty certain that if the Continental Insurance Co. had ever claimed the amount of the consignees, the counsel on the other side in this case would have sharply disputed its right to collect it, though it had paid it to the salvors.

The Continental Insurance Co., has never received one dollar of this fund, and therefore has no concern in its disposition.

The counsel for the British American who obtained this fund from his client, ought to be treated liberally as a salvor for the benefit of whom it may concern. For certainly without his efforts, the whole fund would have been lost.

In a relentless pursuit of the Continental Insurance Co., to compel it to bear all the burdens of this most extravagant adventure every other asset was sacrificed. The vessel by a forced sale, the general average charges, by a written abandonment of them filed in court where these salvors were summoned to receive them.

The Continental Insurance Co., thus pursued, turns upon the prowling suitors, and interposes the eighteenth section of the Act of Congress of June 26th, 1884, as a shield against this unjust, anomalous and inequitable proceeding. The act provides: "That 'the individual liability of a ship-owner, 'shall be limited to the proportion of any or 'all debts or liabilities that his individual 'share of the vessel bears to the whole. 'And in the aggregate liabilities of all the 'owners of a vessel on account of the same, 'shall not exceed the value of such vessels 'and the freight pending. Provided, that 'this provision shall not affect the liability 'of any owner incurred prior to the passage 'of this act, nor prevent any claimant from 'joining all the owners in one action. Nor 'shall the same apply to the wages due to 'the persons employed by said ship-owner.'"

to hold the Continental Insurance Co., under such circumstances, by virtue of its contract of insurance. It is through this contract only that it can be in any way held responsible. Its liability depends upon its being an underwriter that has impliedly acquiesced in the Anglo-American Insurance Co. incurring these expenses, and has thereby, by implication of law, promised to pay for the whole of the expenses, though incurred for the benefit of several distinct interests. There can be no other theory upon which it can be held liable to pay for the whole of these expenses. No law can be found for such a doctrine. The law, on the contrary, is that:

"In cases of abandonment, the insurers 'become the owner of the ship, and as such 'are responsible for the expenses of repairs 'and other necessary equipments for the 'ship made after the time of the loss, to 'which the abandonment refers. But in 'this case, as the ownership is thrown up- 'on them by the law, and as the association 'is not voluntary, they have been held not 'to be partners; but that each is severally 'liable for his proportion of the expenses in 'the ratio which the sum insured by him 'bears to the whole sum insured on the ship. 'And the case was on this occasioned lik- 'ened to that of Hoare v. Davies, Doug., 371 'where a broker was employed by a number 'of persons to purchase a lot of tea, of which 'they were to have separate shares, and he 'made the purchase, and it was decided they 'were severally answerable for their shares 'and respectively, and not jointly. So in 'Cooper v. Eyre, 1 H. Bl., 37, the same 'point was decided on a purchase of oil. 'And Mr. Chief Justice Kent said, that the 'true principle was established in Spelman 'v. De Grave, 2 Vern., 643, where it was 'decided, that for true necessary appropria- 'tions by the master for the wants of the 'ship, the owners should pay in proportion 'to their respective shares and interests in 'the ship. United Insurance Co v. Scott, 1 'Johns., 105. See Rathby's note to 2 Vern., 643.

This law is approved by Lord Tenterden in his work on Shipping, p. 153, and the above is a quotation from the foot note 3 of this excellent work. It is also set up in the petition as the custom of the lakes, and was untraversed, at the time the proofs closed, but by amendment made at hearing, it was traversed, but no evidence offered to sustain the amendment. The law itself however, gains no additional force by being pleaded as a custom. The custom, however under the law goes very far to sustain the good sense of the rule and its equity. Under this rule of law the Continental Insur-

[Continued on 4th Page]

VESSEL OWNERS AND AGENTS.

C. J. MACILL,
VESSEL AGENT,
Vessels Chartered, Bought and Sold, Lake
Freights and River Tow Bills Col-
lected and promptly remitted.
94 Board of Trade, Chicago, Ill.

C. W. ELPHICKE, JAS. A. MYERS
G. W. ELPHICKE & CO.,
Vessel Agents

AND
MARINE UNDERWRITERS.
8 and 8 Sherman St.,
Rooms 10 and 11
Parker Block CHICAGO, ILL.

H. J. WEBB & CO.,
Ship Brokers, Vessel Owners and Agents.
[ESTABLISHED IN 1856.]
H. J. Webb & Co., will charter Vessels for Lake Trade
special attention given to Chartering Vessels in the
Lake Superior Iron Ore Trade, both for the season and
single trip.
RCADE BUILDING, 101 ST. CLAIR ST.,
Room 27, Cleveland, Ohio.
TELEPHONE: Office, No. 338. Residence, No. 1328.

WARNER & BECKER,
Vessel Agents and Brokers,
ROOM 10,
Arcade Bld., 101 St. Clair St.,
CLEVELAND, OHIO.

J. J. H. BROWN, EDWARD SMITH
BROWN & CO.,
Ship Brokers and Agents.
Special Attention given to Surveying, Apprais-
ing and Settling Marine Losses.
Exchange Building, 202 Main-st., Buffalo, N. Y.

ALEX. McDUGALL,
VESSEL AGENT AND BROKER,
Duluth.

Owners and masters of vessels wishing to get cargoes
of grain from this port will do well to confer with me.
Will be glad to furnish information in regard to car-
goes, also in relation to docks, depth of water, etc., at
Duluth, Agate Bay (new iron ore port), Port Ar-
thur, Washburn, Ashland, and all points near the
west end of Lake Superior. Good gangs of men fur-
nished on short notice for unloading cargoes of grain,
loading and unloading all kinds of freight.

PALMER & BENHAM,
Vessel Owners & Agents,
New Bank Building, corner of Superior and
Bank Street, Cleveland, Ohio.

MOORE, BARTOW AND HILCHRIST,
Ship Brokers and Agents,
No. 101 St. Clair Street, Room 15,
CLEVELAND, OHIO.

JAMES T. ROSE,
Vessel Agent and Broker,
Marine Insurance,
Room 6, Exchange Building, Duluth, Minn.
I have an excellent gang of Trimmers this sea-
son, Captain Miller's old crew.
Special Attention Paid to Chartering Vessels,
and seeing that they get dispatch in Port.
CORRESPONDENCE SOLICITED.

THOS. WILSON
MANAGING OWNER
Wilson's Transit Line.
Gen. Forwarder. Freight and Vessel Agent.
CLEVELAND, O.

C. A. KING,
General Stevedoring, Discharging Load-
ing and Ore Trimming Promptly At-
tended to. A Large Force of Men always
on Hand. Information in regard to
DEPTH OF WATER OF ALL DOCKS IN

ASHLAND HARBOR
gladly furnished. Quick dispatch guaranteed.
Patronage Solicited.
C. A. KING, Ashland Wis.

W. M. H. DeWITT,
Attorney and Proctor in Admiralty.
ROOM No. 6, BLACKSTONE BLOCK.
CLEVELAND, OHIO.

C. E. BENHAM,
DEALER IN
GROCERIES,
AND
PROVISIONS.
Green Canned
goods.

FAMILY AND VESSEL SUPPLIES.
GOODS DELIVERED TO ALL PARTS OF THE CITY
121 River-st., Cleveland, O. Telephone 745.

MARTIN MULLEN, Agent,
DEALER IN
Youghiogheny & Massillon Coal
DOCKS AT GOVERNMENT PIER AND RIVER BED BLF.
Office, 81 Perkins Building, East Side of Main
Street Bridge, CLEVELAND, OHIO.
Telephone No. 2701.
BOATS COALED DAY OR NIGHT.

WANTED—TO TRADE
I WILL TRADE FOUR NEW COTTAGES valued at
\$1250 each, for a lumber barge.
Address E. E. KOCH,
1m Foot of Superior street, Toledo, O.

H. D. COFFINBERRY,
PRES'T.

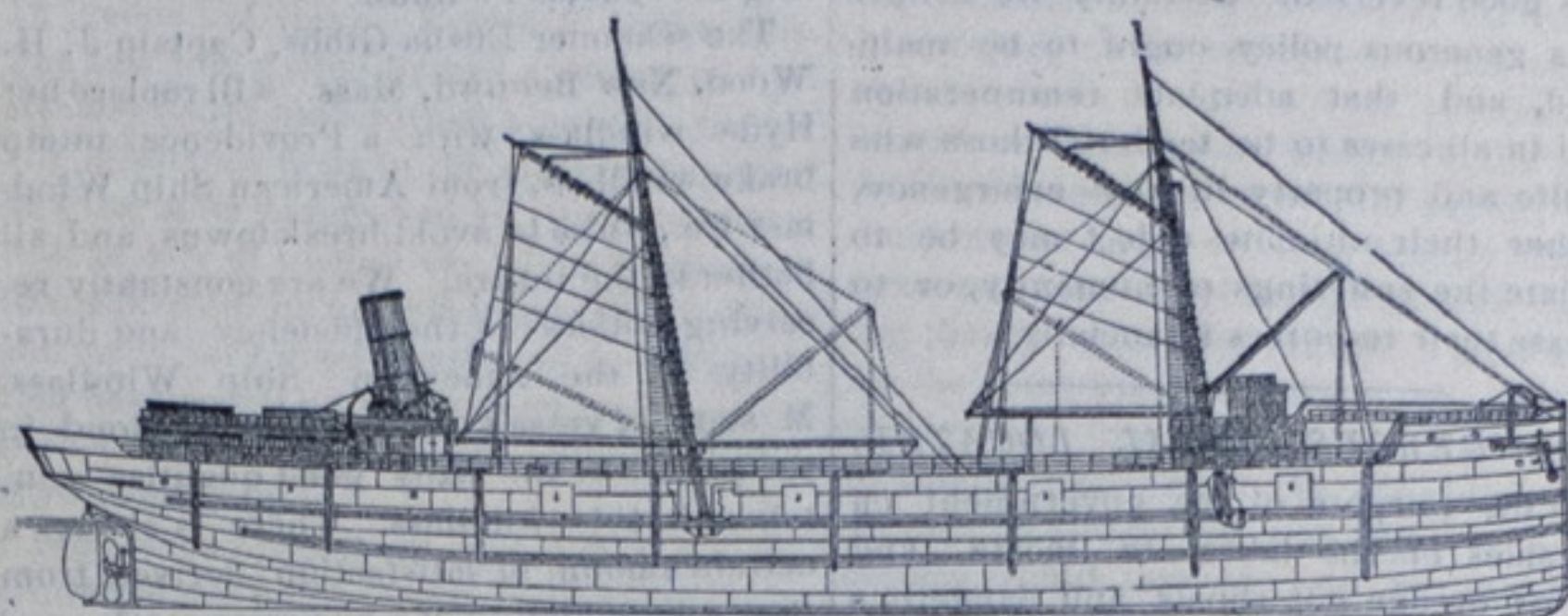
ROBERT WALLACE,
VICE PRES'T.

WM. M. FITCH
SECY.

THE CLEVELAND SHIP-BUILDING COMPANY,

Detroit and Center Streets, Cleveland, Ohio,

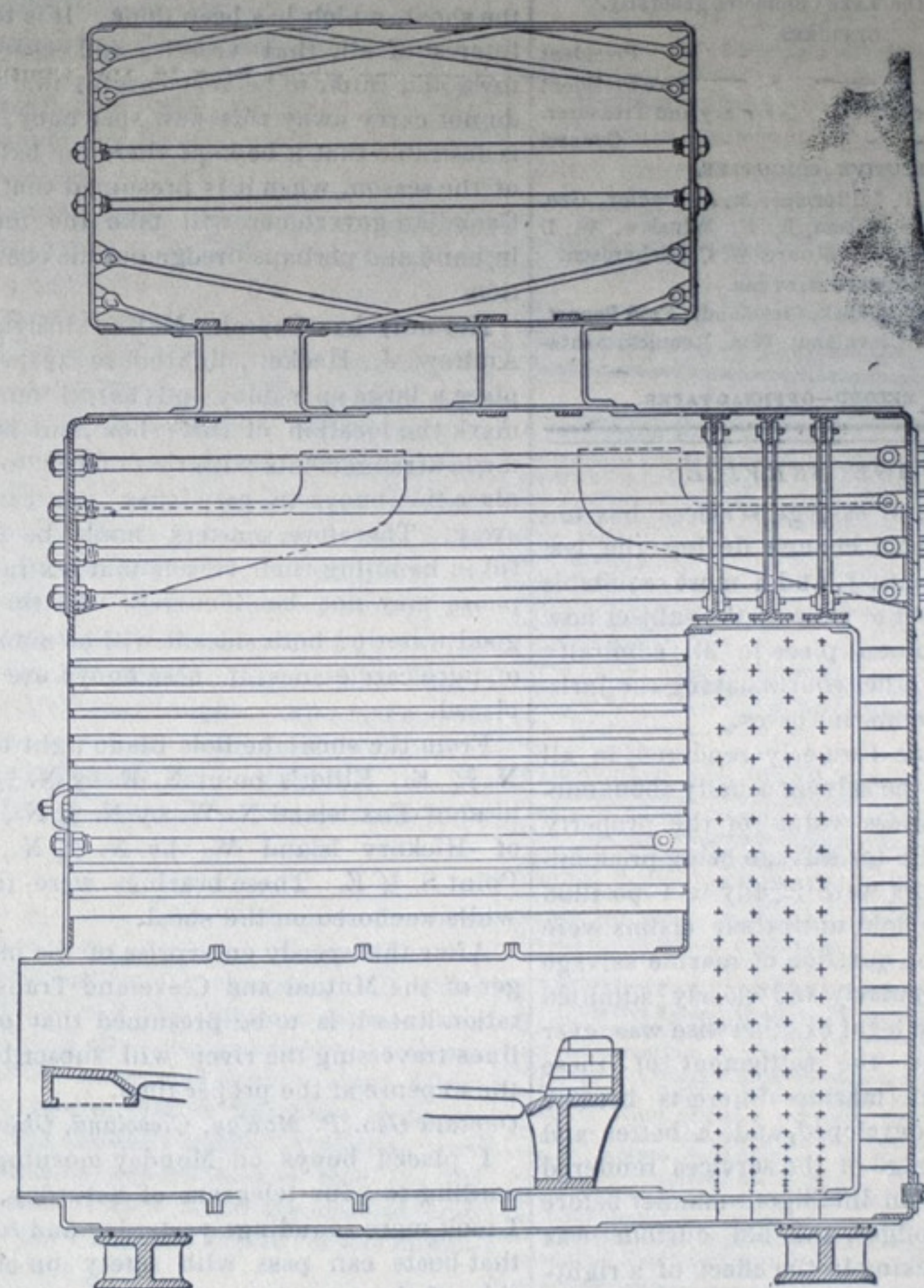
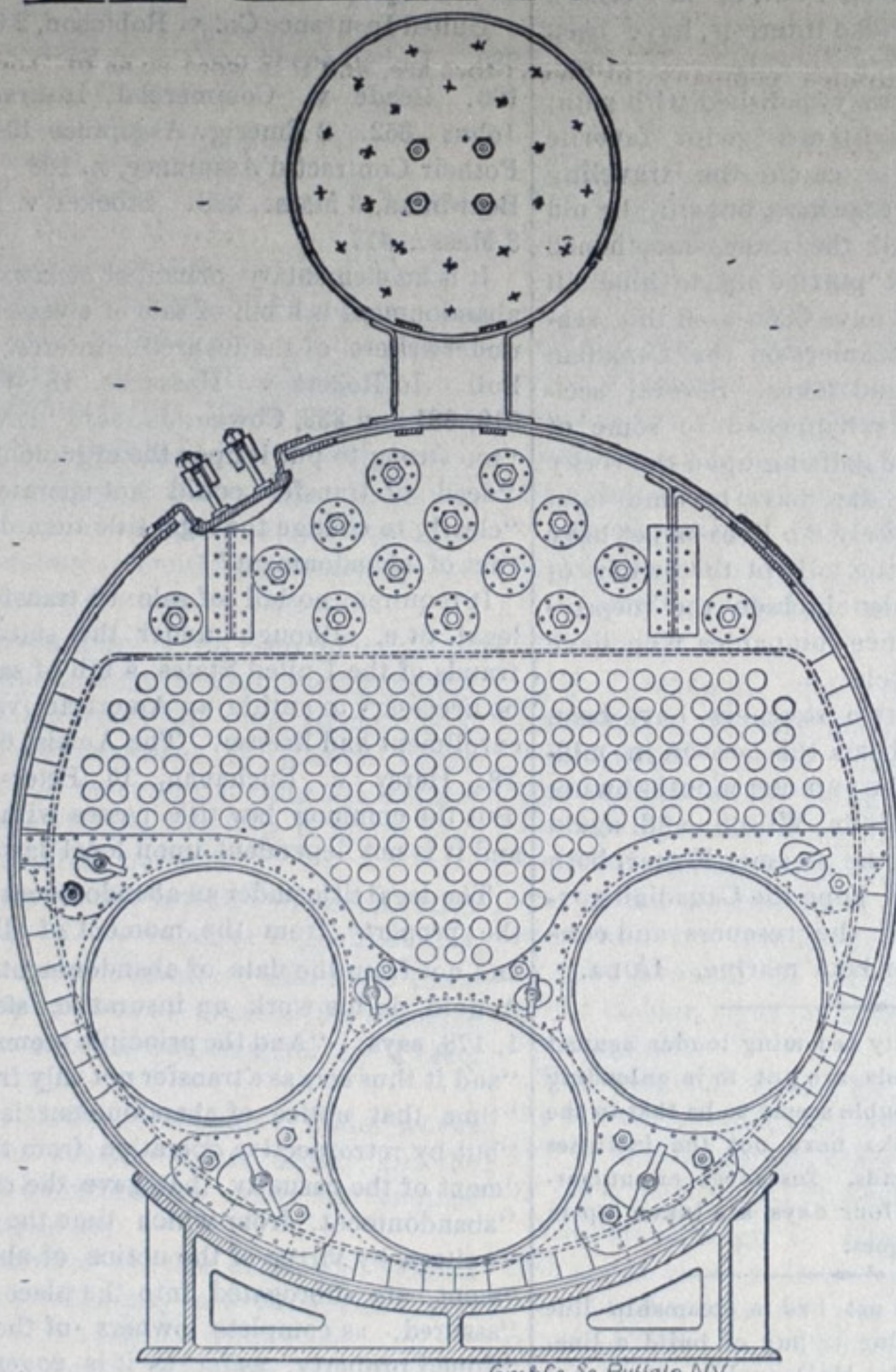
IRON SHIPS.



Marine and Stationary ENGINES AND BOILERS,

Blowing Engines and Steam Hammers,
MILL GEARING AND CASTINGS.
Repairing and Jobbing Solicited. Office on Viaduct.

PHENIX IRON WORKS.



Manufacturers of

STEEPLE FORE AND AFT COMPOUND AND TRIPLE EXPANSION MARINE ENGINES WITH BOILERS OF MODERN DESIGN.

PORT HURON, MICH.

ED. J. KENDALL,
The Marine Reporter.

Collections Made and Prompt Remittance.
Orders Promptly Delivered with Small
Boat Day or Night—Reference
Port Huron Savings Bank,

MARINE REPORTER AT THE STRAITS
Reports of Passing Vessels a Specialty.
Messages Delivered to Passing Vessels Day
or Night, Weather Permitting.
MY ICE REPORTS MAY BE RELIED ON.
SEVENTEEN YEARS EXPERIENCE.
The Patronage of the Marine Public Respec-
tfully Requested—Charges Reasonable.
E. J. STIMPSON, MACKINAW CITY, MICH

ROBERT E. HILLS,
57 & 59 North Wells St., Chicago, Ill.
Telephone 3331.
STEAM FITTING AND HEATING,
Wrought Iron Pipe & Fittings
ENGINEER'S SUPPLIES.
General Jobbing Work Done Promptly.
Also, Proprietor of North Side Brass Work

J. R. OLDHAM, G. E.,
Naval Architect.
Marine Inspector.
SPECIAL EXPERIENCE IN DESIGNING, PRICES
SELF-TRIMMING HATCHES, COAL SH TS
AND BLAKI'S PATENT BOILERS.
32 Exchange Bld.,
BUFFALO, N. Y

Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building] Cleveland, O.

A. A. POMEROY, EDITOR AND PUB

BRANCH OFFICE:
252 South Water Street, Chicago, Illinois,
THOMAS WILLIAMS, Associate Editor.

TERMS OF SUBSCRIPTION:
One year, postage paid.....\$2.00
Six months, postage paid.....1.00
Invariably in advance.

THE MARINE RECORD can be found for sale by the following news dealers:

CLEVELAND, O.—G. F. Bowman, corner of Pearl and Detroit Streets.

Evans & Van Epps, Superior street, Cleveland.
R. A. Castner, 254 Detroit street, Cleveland.
ASHTABULA HARBOR, O.—C. Large.

CHICAGO, ILL.—Joseph Gray, 9 West Randolph Street.

CHICAGO, ILL.—H. B. Hansen, 33 West Randolph Street.

BUFFALO, N. Y.—Miss McCabe, Elk Street, near Ohio.

DETROIT, MICH.—Connors' Marine News Co.

MILWAUKEE, WIS.—T. S. GRAY, CO. 126 Wisconsin St.

SAULT STE MARIE—J. P. Haller.

ASHTABULA HARBOR—O. M. Kahne.

ERIE, PA.—Reed Caughen, 816 State St.

DULUTH, MINN.—C. F. Johnson, 323 West Superior Street.

MARQUETTE, MICH.—J. A. Vannier.

ESCANABA, MICH.—Wm. Godley.

ESCANABA, MICH.—George Preston.

SARNIA, ONT.—D. Mc Masters.

OWEN SOUND, ONT.—J. Sharpe, Jr.

KINGSTON, ONT.—F. Nisbet, corner Brock and Wellington Streets.

Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, O., OCTOBER 18

CLEVELAND VESSEL OWNERS' ASSN

ORGANIZED IN 1880.

[Membership, 1897]

Sixty-five steamers aggregating.....67,865 tons
Ninety-five sail and consort, aggregating 60,089 tons.
Maintains shipping offices at Cleveland and Ashtabula Harbor. Regulates wages, protects crews, and recognizes all matters in the interest of its members and of the Lake Commerce generally.

OFFICERS.

H. M. HANNA, President

H. P. LILLIBRIDGE, Vice President

L. PENNINGTON, Secretary and Treasurer

D. GOULDNER, Counsel

EXECUTIVE COMMITTEE.

H. M. Hanna, H. P. Lillibridge, M. A. Bradley, Geo. P. McKay, Thomas Wilson, R. K. Winslow, W. D. Ees, J. H. Palmer, J. W. Moore, W. C. Richardson.

SHIPPING MASTERS.

A. R. RUMSEY, 98 dock, Cleveland; Fred Bennett, assistant, 98 dock, Cleveland; Wm. Reunick, Ashtabula Harbor.

MARINE RECORD—OFFICIAL PAPER.

SALVAGE SERVICES.

The question of salvage services has undergone a decided change during the last quarter of a century, and a more equitable and common sense view of the subject now obtains a prominent place in all admiralty decisions, and other courts having the jurisdiction to settle marine cases.

The decisions formerly rendered, in all cases, allowed the salvors usually about one-third of the gross value of the property saved. The claim for salvage being predominant, the salvors were legally in a position to have and to hold until their claims were settled, and the question of marine salvage has been so regularly and clearly admitted that no trouble legal or otherwise was ever experienced in the settlement of these claims. When marine interests became more widely developed, and a better and clearer knowledge of the services rendered were placed in an intelligent manner before the various judges, the old custom was found to be lacking in the effect of a righteous decision, and remuneration commensurate with the services rendered was considered a more justifiable mode of administering the laws. This knowledge was not long in gaining ground before all of the marine courts, and as a consequence the modern system was inaugurated to the benefit of trade and commerce all over the world.

The instance of a derelict vessel prematurely abandoned near the coast-line might be cited as showing the advisability of the new departure in salvage claims; in this case the salvors underwent little or no risk either to life or property and the vessel was taken safely into an adjacent port without incurring any great expense, yet such was the nature of the old time salvage claims that the vessel after being libelled was sold to satisfy the claims of the salvors, and both the underwriters and the owners might be said to have suffered a serious loss.

In recent decisions the salvors are only awarded a sum sufficient to remunerate for the services rendered, or in other words, ordinary services are paid for as such, and if there is extraordinary and imminent risks

proved during the rendition of these services, the claims are met and settled generously. Under these laws salvage services will always be obtainable, and where there is no agreement made between the salvors and the principals of the property interested the courts will decide all claims in a matter of fact way. They would also be well advised if in the new system judges were moved to consider that individual skill and exertion ought to be more distinctly acknowledged when the detailed awards were made to the parties claiming salvage so that it could not be said, as the marine puts it, "that the bullets may fly thickest where the most of the prize money goes," for in no case is it correct to award compensation collectively when a result has been obtained individually, and the same rule holds good reversed. Certainly we believe that a generous policy ought to be maintained, and that adequate remuneration ought in all cases to be tendered those who risk life and property in any emergency, whether their ultimate object may be to alleviate the sufferings of humanity, or to increase their resources financially.

A DANGEROUS SHOAL LOCATED.

It is the purpose of the government on both sides of the lakes to locate and buoy or dredge out shoals and dangerous rocks, but the powers that be, pay very little attention to these matters until necessity forces it upon them. There is a shoal at the foot of Bois Blanc Island, mouth of Detroit river, which has been a constant menace to navigation, as it is situated almost in mid-channel for boats passing up and down. This shoal is about on a line between the black can buoy and a new barrel buoy recently placed there by the direction of Captain George P. McKay, of Cleveland, and has but fifteen feet of water over it. During low water but fourteen feet. It is about 550 feet from the Canadian shore proper and 460 feet from the foot of Bois Blanc Island. The shoal is composed of boulders and the Oceanica recently came to grief by finding it. She knocked off her forefoot and sprung a leak, and hardly a day passes that does not contain a record of some vessel striking at that point. When the Oceanica struck sounding was made by the lighthouse keeper and the shoal was found to be about 150 feet up and down, and about 75 feet athwartships, and all last week when the water was low it was covered by only fourteen feet. Captain McKay has also instructed the lighthouse keeper to place a red and black spar buoy to stand up against the shoal, which has been done. It is to the interest of all, that vessels, and especially tows and rafts, to be very careful that they do not carry away this new spar buoy, as it is desirable that it be kept there the balance of the season, when it is presumed that the Canadian government will take the matter in hand and perhaps dredge out the obstruction.

Not only has Captain McKay instructed Andrew J. Hackett, lighthouse keeper, to place a large spar buoy and barrel buoy to mark the location of this shoal, but he has made arrangements with that officer to replace the buoys in case they are carried away. Therefore, masters should be careful in handling their vessels that extra expense may not be incurred. As there is good water on both sides it will be a matter of pure carelessness if these buoys are displaced.

From the shoal the Bois Blanc light bears N. $\frac{3}{4}$ E., Elliot's point N. E. by N. $\frac{3}{4}$ N., head of Fox Island N. W. by N. $\frac{3}{4}$ N., foot of Hickory Island W. by N. $\frac{3}{4}$ N., Bar Point S. $\frac{3}{4}$ E. These bearings were taken while anchored on the shoal.

After this speedy enterprise of the manager of the Mutual and Cleveland Transportation lines it is to be presumed that other lines traversing the river will subscribe to the expense at the proper time.

Captain Geo. P. McKay, Cleveland, Ohio:

I placed buoys on Monday morning according to your telegram of Saturday, and I took more soundings yesterday and found that boats can pass with safety on either side of the spar buoy, but must not pass within a hundred feet of it on either side. I think if all the large boats would pass half way between spar and red barrel on main channel bank they would have no further trouble. Therefore, I will keep it closely watched and properly buoyed.

ANDREW HACKETT.

By direction of the lighthouse board the buoys in Lake Michigan north of latitude 44° 50' N. and in Green bay north of Washington Island will be replaced November 1 by spar buoys, properly marked, that will be allowed to remain in position until nipped or swept away by the ice.

The Lake Michigan and Lake Superior transportation company contemplates adding two passenger steamers to its fleet before the opening of navigation next season, either by building or purchase.

The new tug J. W. Geo, of Maytham's line, was launched at Buffalo Monday afternoon. She is 80 feet long and has a 23 by 28 inch engine, and is considered the most powerful harbor tug afloat.

THE PROVIDENCE STEAM CAPSTAN.

The American Ship Windlass Company, are to put their steam capstans on the steamers, Niagara, Saratoga, Santiago, City of Washington, and City of Alexandria, of the Ward line. The utility of these capstans having been demonstrated on the newer ships of this line, Messrs. Jas. E. Ward & Co., have decided to have them on the older ships. The attention of steamship owners who wish to keep up with the times are called to the advantages of Providence Steam Capstans.

The owners of the schooner Governor Ames, having ordered a Providence pump brake windlass of latest style to handle their chains and anchors by steam, have now decided on a new departure and will have a Providence steam capstan, also, for handling the schooner's lines.

The schooner Elisha Gibbs, Captain J. H. Wood, New Bedford, Mass., will replace her Hyde windlass with a Providence pump brake windlass, from American Ship Windlass Co., so as to avoid breakdowns and all bother in the future. We are constantly receiving notices of the efficiency and durability of the American Ship Windlass. Masters of vessels and owners are loud in the praises of the many good qualities contained in this windlass. There is always a certain amount of satisfaction derived from the recommending of a superior work, and we can unqualifiedly endorse the superior excellence of the American ship windlass over any other manufactured.

CANADIAN STEAMERS.

DETROIT, Oct. 15.

Editor of the Marine Record:

I notice the re-urction of the foundered Canadian steamer California, of last fall's storms, and being now at Windsor, Ontario, presumably to be again rebuilt and refitted as a passenger steamer as a further coffin to drown other foolish persons who will take passage upon her and her class of steamers. It may be remembered that the California was of the old style, known as a Welland canaller, which, since the enlargement of that waterway, was hauled out, cut in two, and lengthened by adding to her midship sections. She proved, as had been surmised at the period of her increased carrying capacity, to be a dangerous lake craft, as many others of her class had proved themselves to be. She went to the bottom while in the sheltered straits of Mackinaw, last November, and drowned one-half her passengers and crew, and, Mr. Editor, there are others of her class, rebuilt old hulks, condemned some years ago, but, as last season was prosperous to lake interests, have been remodeled, refitted, highly advertised, lighted with electricity, polished with paint and bronze, rechristened with favorite historic names to catch the traveling public and pleasure seekers, but still the old hulks are there all the same, smoothened with the adze and puttied up to hide all blemishes. These have been used this season as passenger steamers on the Canadian shores of the inland lakes. Several accidents have already happened to some of them, steaming and drifting upon the rocky shores. Three, so far, have become total losses, but fortunately no lives as yet have been sacrificed to the folly of the owners of such craft, and I also include the inspectors and the insurance companies who have to do with such vessels.

The crews of two steamers have been taken from small boats this season in mid-lake; one during the summer months owing to the loss of the Belle Wilson, and again after the wreck of the steamer Foster, both on Lake Huron. I hope the Canadian government will award the rescuers and condemn more of their lake marine. LULA.

Complaints are daily becoming louder against the delays coal vessels are put to in unloading at Chicago. The trouble seems to be that in the rush of boats the docks have not the facilities for handling their loads. Instances are numerous where three and four days are taken up in unloading small cargoes.

Duluth, which has not had a steamship line since 1873, is preparing to buy or build a line. It would like to utilize McDougall's patent, but probably will look after the ordinary class of boat. The prospect of two vessels in the new line is said by a local paper to be good.

Shipments by water from the East Saginaw river for the week ending October 12: lumber, 12,940,000; shingles, 5,450,000.

The straight channel at Sandusky will be dredged by French & Rooney of Toledo for 24½ cents per square yard. The same firm will also do the dredging in Rouge river, near Detroit, for 11½ cents per square yard.

Thomas Leach, second engineer of the propeller Mary Pringle was dangerously scalded at Alpena Monday on both arms, face and leg. He was taking the cap off the check valve and forgot to close the plug. The boiler had on twenty pounds of steam.

Kingston wreckers claim to have a grievance on account of the Canadian government allowing American wreckers to work in Canadian waters on Georgian Bay and Lake Erie.

[Marine Law, Continued from 2d Page.]

ance Co. would be in the absence of the statute, liable for one quarter of the general and particular average charges, which one-quarter amounts in all to about \$1,500. Of this amount the sale of the schooner has reduced it by some \$306. Practically, \$1,200 is the amount for which the Continental Insurance Company seeks to limit its liability to the value of its interest in the vessel and the freight actually earned.

The petition claims that the owners of the schooner Elgin, who were underwritten by the petitioner while the vessel lay on the beach, on the 7th day of August, 1884, abandoned her to the underwriters, and that the Continental Insurance Co. acquired thereby a quarter interest in her, as owner from the date of the commencement of the disaster and as such, is entitled to the benefit of the eighteenth section of the act of June 26th, 1884.

The validity of the abandonment cannot be seriously questioned, and whether the insurance company has paid the assured the face of the policy, or has taken up the policy is of no consequence, if it has not so satisfied the assured a suit can be maintained on the policy. Whatever is due them from the insurer, is no concern of salvors, and the salvors can, by virtue of this abandonment alone, hold the underwriter liable as owner for the amount it may be liable by reason of the abandonment, irrespective of whether the underwriter has paid the assured or not.

It was contended at the trial that the fact whether the vessel was injured over fifty per cent. of her value would suspend the effect of the abandonment, until this was ascertained. This is not the law. The abandonment is good and effectual, and binds all parties, if at the time of the abandonment, it appeared probable that the loss might amount to fifty per cent. Oriental Insurance Co. v. Adams, 123 U. S., 74. This is the latest case on the subject, and settles whatever supposed ambiguity there may be in the opinion in the case of the John Wesley, 22 F. R., 73.

If the abandonment was good, it by relation fixed the rights of all parties at the commencement of the loss, so that the salvors could sue underwriters as owners from that date for their contributory share and when sued, the underwriters, as a consequence, and corollary, could avail themselves of any defense accorded owners, existing at that time, that they could be so sued by these salvors is settled by a line of decisions, which cannot now be questioned.

United Insurance Co. v. Robinson, 2 Gaines, 280. United Insurance Co. v. Scott, 1 Johns., 106. Reads v. Commercial Insurance, 3 Johns., 352. 2 Emerig. Assurance 194, 196. Pothier Contract d'Assurance, n. 188. Lee v. Boardman, 3 Mass., 238. Stocker v. Harris, 3 Mass., 417.

It is an elementary principle of law that an abandonment is a bill of sale of a vessel to the underwriters of the insured's interest in the hull. In Rogers v. Hassacks, 18 Wendell, 819, 331 and 332, Cowen, J., says "it was not 'too strong to put it upon the argument that a 'deed of transfer could not operate more 'clearly to change the legal title than does the 'act of abandonment.'"

It requires no bill of sale to transfer the legal title, although under the statutes of frauds of the United States a bill of sale may be necessary to entitle an American vessel to enrollment and license. The Ameia, 6 Wall., 18; Harsy v. Buchanan, 16 Peters, 220. But the common law title passes without it, and it is not dependent upon local laws.

The legal title under an abandonment passes the property from the moment of disaster, and not from the date of abandonment. Mr. Arnold, in his work on insurance, star page 1, 178, says: "And the principle seems to be, 'and it thus acts as a transfer not only from the 'time that notice of abandonment is given, 'but by retrospective operation from the moment of the casualty that gave the right to 'abandonment, from which time the underwriters, by virtue of the notice of abandonment, are subrogated into the place of the 'assured, as complete owners of the abandoned property, as far as it is covered by 'the insurance.' In Mellen v. Bucks, 17 Marten, [La.] 371, Mathews, J., says: If the abandonment was made under circumstances which legally authorized such steps on the part of the insured, the insurers being bound to indemnify him for total loss, must be considered as having become owners of the property which was abandoned *ipso facto* without any formal acceptance, but merely as a consequence necessarily following from the nature of the contract of insurance.

Such abandonment without acceptance or payment of the loss was held in that case to divest the interest of the owner in the goods insured so that he could not sue the master and owner as carrier for their omission to transport the goods.

Mr. Justice Johnson says, in his dissenting opinion in Columbia Insurance Co. v. Catlett, (12 Wheaton, 400), but not a dissent on this point. "The abandonment had the same effect as if the owner and assured had been on 'board, and the abandonment made at the 'time the misfortune occurred." Union Insurance Co. v. Burnell, Auth. Cas., 128, Union Insurance Co. v. Scott, Johns., 160,

110. Smith v. Mfg. Co., 5 Metcalf 453, Mutual Insurance Co. v. Hall, 104 Mass., 507; Arnold on Insurance, Perkins' Ed., 1, 178, and note 8; 2 Phillips on Ins., Sec. 1, 1,708; 8d Kent, star page 313. Stewart v. Grennock, Mar. 1. Co. 2. H. L. Ca. 159, Concluding remarks in case of Wallace v. Thames & Mersey Insurance Co., 22d Fed. Rep., 73. Emerigon (Meridith's Ed., p. 686), says: The abandonment had a retrospective effect as against the insurers, who, to the extent of the interest insured are presumed to have been from the beginning the owners of the thing insured, and Marshall on insurance, star page 601, says the same. That an abandonment has the same effect, see insurance company v. Catlett, 12 Wheaton, 400; 2d Caines, 283; 1st Johns., 160; Auth. Cas., 128; 7h Metcalf 453; 2d Phillips on insurance, Sec. 1,708; 3d Kent, star page 318; Stewart v. Grennock, Mar. 1, Co. 2. U. L. Ca., 159; concluding remarks in the case of Wallace v. Thames & Mersey Ins. Co., 22d Fed., 113; 104 Mass., 507.

That the Continental Ins. Co., by act of abandonment, if justified, became the owner of the schooner Elgin, 2d of August, 1884, under the foregoing authorities, is a proposition that cannot be questioned. The underwriters is entitled to the ship earnings from the time abandonment takes effect, and all other rights incident to ownership. Loundes on insurance, Sec. 263. They are consequently liable as its property to parties for all repairs and necessary expenses incurred after the loss, including seamen's wages. (Abbot on shipping, page 57, foot note at top page 79.)

It is said in Loundes on insurance, Sec. 263, "An abandonment has the effect of a transfer 'of the thing insured, with all rights and interests appertaining to it from the assured to the underwriter. The transfer takes effect, 'not from the time of abandonment, but from 'that of the accident which justified it."

The rule that an abandonment has a retrospective effect will not be denied as between the owners and the underwriters, does it apply to third parties dealing ad interim. Whenever there is an exception carved out of a rule, it is always based on some real or supposed equity. There are many contracts binding between the parties that do not effect third parties, it is true, but the exception in these cases rests upon the fact that the third parties were strangers to the transaction, and had neither actual nor constructive knowledge of it. If the salvors are not to be bound by the rule that the abandonment has a retrospective effect they must claim their exemption on the ground that they were strangers to the contract giving the right to abandon, for if they had knowledge of the contract of insurance authorizing the abandonment, then they are conclusively presumed to have knowledge that the legal effect of the abandonment would be to change the position of the Continental Insurance company from underwriter to owner from the moment of the disaster. Can they be said to be strangers to the contract of insurance in this case? We think not. The salvors knew that the petitioner was an insurance company, whose business was to make contracts of insurance. They knew that it was by virtue of a custom existing among insurance companies that the agent of the Anglo-American Insurance company, John Prindville, Jr., had authority to pledge the credit of the petitioner. They knew that it was by virtue of a contract of insurance that the master of the Elgin had the right to bind the Continental Insurance company. In fact, it is by and through the contract of insurance that the Continental Insurance company is sought to be bound by the salvors themselves. Aside from the policy, it would owe not one cent, for it will not be conceded that it pledged its personal credit, for it was not present, nor did it participate through any of its representatives, in the making of any of the contracts with the libelants except the one with Millers Brothers. It was only by virtue of the marine law that the agent of the Anglo-American Insurance company, or the master of the vessel had authority to bind the Continental Insurance company, and then only by reason of, and to the extent of the interest it derived under the contract of insurance. If, then, the libelants have knowledge of the contract of insurance, they are conclusively presumed to have had knowledge of that inseparable right of abandonment, which the law affixes and makes part of the contract itself, and which is also declared in all policies. Hence we contend that by act of abandonment, made on the 7th of August, the Continental Insurance company became owner of one-fourth interest in the schooner, from the 3d, the date of the disaster, and the work that was performed by the libelants between the 3d and 7th was performed with full knowledge of the fact [whether the Continental Insurance company was underwriter or owner at the time was unknown to even the Continental Insurance company itself]; that the relation it bore to the schooner was to be afterwards ascertained by the original owners declaring their intention.

Besides, if the rule that the abandonment conveys the property from the date of the disaster is to be confined to the underwriters and insured, and not to be extended to third parties who have contracted ad interim, the

Concluded next week.

LAKE CARRIERS' ASSOCIATION

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARACTER OF THE SERVICE RENDERED TO THE PUBLIC, TO PROMOTE THE COMMON INTEREST OF LAKE CARRIERS, AND PROMOTE THEIR GENERAL WELFARE.

BOARD OF MANAGERS, 1888.

THOMAS MARTIN, President	Oswego, N. Y.
JAMES ASH, Vice President	Buffalo, N. Y.
W. BULLARD, Vice President	Buffalo, N. Y.
S. D. CALDWELL, President	Buffalo, N. Y.
E. T. EVANS, Vice President	Buffalo, N. Y.
W. P. HENRY, Vice President	Buffalo, N. Y.
P. P. MILLER, Vice President	Buffalo, N. Y.
FRANK J. FIRTH, Vice President	Erie, Pa.
M. A. BRADLEY, Vice President	Cleveland, O.
H. M. HANNA, Vice President	Cleveland, O.
THOMAS WILSON, Vice President	Toledo, O.
A. W. COLTON, Vice President	Detroit, Mich.
JAMES W. MILLEN, Vice President	Detroit, Mich.
EDWARD WARD, Vice President	Bay City, Mich.
JAMES DAVIDSON, Vice President	Chicago, Ill.
W. M. EGAN, Vice President	Chicago, Ill.
IRA H. OWEN, Vice President	Chicago, Ill.
R. P. FITZGERALD, Vice President	Milwaukee, Wis.
DAVID VANCE, Vice President	Milwaukee, Wis.
ALEX. McDONALD, Vice President	Duluth, Minn.
HARRY MURPHY, Secretary	Buffalo, N. Y.
JAS. CAREY EVANS, Treasurer	Buffalo, N. Y.

LAKE CARRIERS' ASSOCIATION.

To the Editor of the Marine Record.

A meeting of the board of managers of the Lake Carriers' Association was held in the committee rooms of the Merchant's exchange at 2:30 p. m., October 10th. Mr. S. D. Caldwell, president, occupied the chair. The attendance was good, and included Managers Ira H. Owen, of Chicago, and J. W. Millen of Detroit.

The first matter considered was the rules and regulations to be prescribed for the navigation of the St. Clair Flats Ship canal. Captain Millen presented a set of proposed rules and regulations drawn up by General Poe, and explained that they had been prepared by the general after consultation, with the leading representatives of the Lake Carriers' Association residing at Detroit. The rules were then read and discussed in order, and after some slight amendment, were, on motion, endorsed by the board. These rules will be printed and ready for distribution shortly, and copies can then be had upon application to General Poe.

It was thought by some of the managers present, that, as matters of importance connected with the lake marine were liable to arise at any time, upon which the government officials at Detroit might wish to secure immediate advice from the leading vessel owners, the Lake Carriers' Association should have at Detroit a committee consisting of its managers at that port; who could at once be reached and consulted with, and it was understood that the proposition met with the approval of General Poe. It was therefore moved and seconded that Captain Jas. W. Millen, and Captain Eber Ward be appointed a standing committee at Detroit, upon whom General Poe or any of the government officials there may call for advice upon any matters connected with lake navigation, when they desired so to do. The motion was passed unanimously.

The subject of the testing of elevator scales at Duluth was next discussed. Extracts were read from letters received by the secretary, to the effect that the elevator people at that point believe that a scale weighing 45,000 pounds can be correctly tested with 2,000 pounds of weights. The unanimous opinion of the managers was such a test as that would be entirely inadequate, and the secretary was directed to continue the correspondence, with a view to bringing about, if possible, a more correct and thorough testing of the elevator scales at Duluth, than that which they now undergo.

The subject of raft towing, and of the senate bill amending sections 4488 and 4489 of the revised statutes, both of which had been discussed at a previous meeting, were again brought up, as were also some other matters of importance, but no definite action was taken.

CLAYTON.

Captain Beaupre, of the Thousand Island Steamboat Co., has been in Montreal for the past few days looking over the steamer Pilgrimage of that city with a view of buying her for the company. She is a steel boat about the size of the St. Lawrence, and if purchased will be put on the route between Cape Vincent and Kingston, in place of the Maud, and will also be used as an excursion boat.

M. J. Whitney, of Henderson, is interested in opening a new transportation route from Henderson and other points along the lake shore, to Oswego and Syracuse. A fleet of canal boats and a steam barge are already engaged in such traffic, and others can be procured as the increase of business demands. The boats reach Syracuse via the Oswego canal, and a large saving in freights is thus made. It is proposed to bring merchandise to the various places on the return trips of their line of boats, thereby benefiting people in the south part of the county in that respect.

It was Captain Beaupre, of the schooner Watertown, who lowered his yawl on Sunday morning and rescued Frank Turner, the only survivor of the terrible yachting accident on the St. Lawrence river near Brockville, when H. A. Field, Henry Bagg and Herbert and Fred Shepherd, all of Brockville, were drowned. The schooner Watertown was in a passing tow at the time, and Captain Beaupre on lowering his yawl entered it and himself hauled Turner into it. The drowning man was nearly exhausted, and his first words were "My God, am I the only one saved?"

Around the Lakes Continued from 1st Page.

DETROIT.

Special to the Marine Record.

The tug Kate Williams was at Hodge's this week cleaning out and having some repairs to her machinery. They also repaired the crosshead of the steam barge Sakie Shepard, straightened the piston rod and repaired the piston of the Vance, repaired the throttle of the S. E. Peck, and done some work for the tug Music.

The Hodge wheel is undoubtedly all they claim for it. The firm recently made one for the tug Maytham of Lake Superior, and they have received a letter from her owner, who says that on her daily run of 85 miles with a tow the wheel enables the boat to save one hour in time, gives the fireman less work, and saves him a big ton of coal, and that he cannot have a better wheel for the work, and he is so well pleased that he has given the order for a new wheel for another of his tugs.

Samuel F. Hodge & Co. have taken a contract for another engine. It is to be a fore and aft compound 26 and 48 by 40 stroke, and will be supplied with steam from a 12 by 16 fire box boiler. The contract is from Simon Langell, the builder of the fast boat Kalyuga, and this engine will be put in a vessel he is now building.

J. C. Goss, sailmaker, has secured the contract for supplying the new steamer City of Detroit with all the canvas necessary for her sheathing, etc. Mr. Goss has also a force to work covering the boilers and steam pipes at the new waterworks erected in Pontiac.

Mr. Oades, shipbuilder, seems to have enjoyed his recent visit east, and will no doubt soon be figuring on new work for his large plant here.

The East End Boiler works are doing a considerable amount of job work, and have also men busy at the water works.

Detroit Drydock company have the schooner Racine in for a thorough overhauling after her recent trouble. She has had part new keel and bottom. The steam barge Byron T. Rice is in dock for a Hodge propeller wheel; work on the new steamer of the Detroit & Cleveland Steam Navigation company is being pushed along rapidly and the builders expect to have her housed in before the snow flies, the upper saloon is in frame and the most of her machinery is placed, including the windlass and capstan, furnished by the American Ship Windlass company of Providence.

The Detroit Boat works are pushing their new works near Belle Isle bridge on toward completion, the extended plant, coupled with the splendid location, will allow this energetic firm to largely increase their business connections.

Bids for dredging at the Lime Kilns were opened at Detroit Monday. The lowest was that of Dunbar & Sullivan of Buffalo, which was \$4.43 per yard for solid rock, of which there is over 14,000 yards. Still it is reported that the bid of Heckler & Green of Buffalo and Sault Ste. Marie will be recommended, though it is \$4.75 for solid rock.

Messrs. Parker & Millen were largely instrumental in closing the sale of the steam barge Kershaw, recently purchased by J. C. Fitzpatrick and others of Cleveland.

S. B. Grummond's tug Champion headed a procession of eight vessels passing through the river this week; the long string caused considerable comment in marine circles here, yet this favorite river tug has eclipsed the late showing by heading a list of nine vessels including herself.

The Eagle Iron works shipped a large boiler to the Lake Superior copper country, and have closed a contract with John Craig & Son, shipbuilders of Trenton, for a marine boiler measuring 8 feet diameter by 16 feet long.

Thomas McGregor's Central Boiler works have about completed late orders, and the plant will be cleared up ready for another rush of business.

Mr. Upson, of the firm of Upson, Walton & Co., was in the city last week, and called on many of his friends while here.

Steve B. Conklin, who has just started a new sail loft in Grummond's block, foot of 1st street, will shortly be ready for active business. Mr. Conklin is well known in marine circles, having been a number of years at the trade in Cleveland.

J. T. Wing & Co have made considerable improvement in their fine store with a view to entering more largely into the marine trade of ship chandlery, etc. Mr. Scott, who has connected himself with this firm, is an energetic man of good business ability, and has been in the services of some of the best ship chandlery firms on the lakes.

The patent speed wheel mentioned in a former letter is named the Belduke combination, after the patentee and proprietor, Joseph Belduke of San Francisco, California. Your correspondent was recently furnished with a cut of the wheel, the blades of which have the usual twist, or helical surface, but they are not attached to the hub or center, instead, they are secured to a circular iron rim or band, which is itself attached to the propelling shaft by means of radial arms. The inventor claims 30 per cent. in speed over ordinary wheels,

and a saving of fuel. If these claims are valid the invention will prove an important step in the right direction, and will soon become widely known.

The Baker & Huck, patent engine under construction at the Frontier Iron works, is nearly completed. The invention has been granted European and Canadian patents, and should the machinery approach anything like the merits claimed for it, a large demand will keep the inventors busy; a full description and particulars of this engine will be forwarded later on.

Captain Edwards writes to the Free Press as follows: I notice an item in the marine column of the Evening Journal stating that Captain Frazer, of the steam barge Scotia, had cast the barge Southampton adrift on Saginaw Bay. In justice to Captain Frazer I write this. The tow line parted by bad steering and no steamer could have turned around to render any assistance to us in the sea running then and the other barges had all they could do to take care of themselves. The Southampton leaked in the northeast gale of wind, but she made very good weather of it. We carried her foresail all night and are now in Sarnia Bay with her cargo. (Signed) ED. EDWARDS, captain.

Bids were opened in the office of the United States engineer at Detroit Monday for blasting and dredging the Limekiln crossing channel to a uniform width of 400 feet, under the \$130,500 appropriation made by congress last winter. There are about one hundred tons of loose rock to be removed, the remainder, some 1,300 tons, being solid. The bids were as follows: Dunbar & Sullivan, Buffalo, \$4.48 per cubic yard for solid and \$1 per cubic yard for the loose rock; Carkin, Stickney & Cram, East Saginaw, \$4.43 and \$1; Hickler and Green, Sault Ste. Marie, \$4.75 and 60 cents; L. P. & J. H. Smith, Cleveland, \$5.50 and \$2; William Patrick, Fulton, N. Y., \$5.80 and \$2; Jennings & French, Fulton N. Y., \$5.20 and \$2.50. Work on the improvement will be begun at once. SWAIN.

MILWAUKEE.

Special to the Marine Record.

Messrs. Wolf & Davidson have launched the third steamer for their line. Instead of honoring the political party to which he belongs and calling this fine steamship "Protection," Mr. Wolf has named her the George H. Dyer, after his grandson. There was a slight hitch in launching the Dyer and she did not leave the ways fairly, her bow being in the water before the stern had fairly started. No damage was done, however, as the boat is as strong as wood and iron can make her. The Dyer's dimensions are as follows: 228 feet long, 36 feet beam, and 23 feet moulded depth, making her have a very lofty appearance when light. Her tonnage measurement is gross 1,372.18 and net 1,086.30. Her power comprises a steerable compound engine with cylinders of 20 and 36 by 30 stroke, built by Sheriffs, and also one of their well known wheels 9 feet 8 inches diameter and 13 feet pitch. She has two marine boilers 6 feet 6 inches diameter and 13 feet long, built by the Lake Erie Boiler works and will carry 120 pounds of steam pressure. She will carry three spars with canvas on the fore and main. Her carrying capacity is estimated at 1,500 gross tons.

Mr. Learmont, chief engineer of the Anchor line, is here looking after the repairs on the steamer Susquehanna. The shoe and rudder are being made in Buffalo. There is a peculiar thing in relation to the accident. After losing her shoe and rudder this fine steamer came head up into the wind, and for seventy-five miles took as straight a course as she could take, even with a rudder, right for shelter under Thunder bay light.

The propeller D. J. Foley's is in dock at the Milwaukee Shipyard company getting a new Sheriff wheel and other repairs, caused by getting on the bar at Racine.

The steam barge C. Hickox broke her crank pin shortly after leaving port the night of the 18th, and was towed back to receive a new one. The accident will delay her about ten days.

Messrs. Fitzgerald, Egan & Armour, of this port, have sold the steamer C. J. Kershaw to Fitzpatrick and others of Cleveland, consideration \$45,000. The Kershaw was built at Bangor in 1874, and registers 1,109 tons, rates A2, with an insurance valuation of \$50,000.

On her present trip down the steamer Helena made the run from Mackinac City to Port Huron in 23 hours, or at the rate of 11½ miles per hour.

The tug Bues was in dock for calking and re-ironing; the tug Starke Bros. for much needed repairs to her hull.

The schooner Columbia was at the Milwaukee Shipyard company to have top sides calked, and the steamer Superior to stop a slight leak.

The steam barge Swain was in dock to stop a leak around her stern post and repairs to bearing.

Captain Gibbs has sold his interest in the steamer Omaha; he has also resigned the command of her and is succeeded by Captain Clark, formerly first mate.

Captain Anderson, formerly of the

steamer Veronica, has purchased an interest in the new boat Dyer, and will take command of her.

The Milwaukee Evening Wisconsin says: "The five hoists of the Northwestern fuel company's new lower dock were brought into play on the steamer Helena, Saturday, in a manner that proved surprising. Work was begun at 8 a. m., and at 5 o'clock in the evening only 500 tons of her cargo of 2,617 tons remained on board. This could have been taken out in two hours more had it been necessary. But Sunday intervened, and the steamer could not load at Chicago until Monday."

Captain Stoddard of the schooner Boaz arrived at Milwaukee with news of a marine disaster not heretofore reported. While lying at anchor under Plum Island last Tuesday in company with twenty-six other sail and steam vessels a fore and aft schooner ran ashore on Washington island, to the northward and westward of Detroit harbor, where she pounded on the rocks so heavily that her foremast soon toppled over the side, indicating that the craft had become a total wreck. As the point where she struck was about five miles distant from the anchorage, it could not be determined, even with the aid of marine glasses, whether she was light or loaded, neither could her identity be established. Captain Stoddard judged from her size that she would carry about 150,000 feet of lumber.

In order to keep pace with the demands of the times, as well as the greatly increased size of the steamers now doing business on the lakes, Messrs. Wolf & Davidson propose to add fifty feet to the length of their stationary drydock. It is now the largest dock on Lake Michigan, and the only one which could accommodate the Anchor Line flyer Susquehanna, which has an extreme length of 325 feet although her tonnage length is only 302 feet 5 inches. Yet it is not large enough to accommodate such steamers as the Union Line's Owego and Chemung, each of which measure 354 feet over all. The extension will probably be made early next season, after the rush of spring work is over. When completed Milwaukee will be able to boast of stationary dry-dock facilities equal to any lake port.

There has been some figuring for new vessel property at this port, but it is not definitely known as to whether any new work will be done or not. J.

WEST BAY CITY.

It is said that Mr. James Corrigan and others have been figuring on buying the steamboat which James Davidson has on the stocks there. Mr. Corrigan and Mr. Davidson have a suit at law pending on one steamboat but it is understood that they are not enemies on this account. The action was probably brought to sustain the reputation of both boat and builder.

Captain Davidson reports that in about ten days he will launch a big steam barge and later a consort for her. The steamer is 285 feet in keel, 315 feet over all, 40 feet in beam, 27 feet in molded depth. She has gangways and carries three spars. Her engine is triple expansion, with cylinders 20, 32, and 54 inches and 41 inch stroke. This was built by the Frontier works of Detroit, in which Captain Davidson is an owner. The wheel 13 feet in diameter with 16 feet pitch, also came from that shop. Riter of Buffalo furnished two steel boilers, each 13 by 11½ feet and to run 150 pound pressure. This boat is to carry 3,000 tons freight and to make about 15 miles per hour, says the captain. The consort is 245 feet over all, 38 feet in beam and 20 feet in hold and will carry about 2,400 tons.

RACINE.

While en route from Chicago to Escanaba with the schooner American Union, Saturday night, the heel of the steamer D. J. Foley struck Racine reef with sufficient force to carry away the shoe, stern post and rudder, break one bucket of the wheel, and damage about fifteen feet of the keel so that it will have to be renewed. The steamer's signals of distress were heard at Racine, who hastened to send the tug Sill out, and the latter towed the disabled craft to port. The Foley was docked at the Milwaukee company's yard.

KINGSTON.

The break in the Cornwall canal has created consternation among the forwarding companies. The Montreal Transportation company has two tows below the break and one above, and the Kingston & Montreal Forwarding company has a tow above. The Montreal Transportation company has a large quantity of grain here now and expects much more, while the Kingston & Montreal Forwarding company is expecting a large fleet. Both companies will suffer greatly by the break, which will take two weeks to repair.

Application has been made to the authorities at Washington to allow the Algonquin, in port with over 70,000 bushels of grain, to proceed to Ogdensburg and transship her cargo into an elevator there until the break in the Cornwall canal is repaired.

LAKE FREIGHTS.

Lake freights are just at this writing more especially ruled by the grain markets, and remain unsatisfactory. Should heavy shipments from Duluth come forward, all rates of freight would soon take an upward tendency. The recent slight advance of 5 cents on ore in the Lake Superior trade is gratifying, but we look for something better at this time of the year.

SOUNDINGS BY CHART.

DETROIT, Oct. 16.

To the Editor of the Marine Record.

I sent you a letter some time ago in reference to a communication published in the MARINE RECORD and signed P. Carolan, in your last issue, and P. C. endeavors to answer a few of my remarks saying that the compass and chart are of no use to the mariner in foggy weather in the English channel and that if he steers by them he steers to his own destruction.

The utter absurdity of such a reply is enough to wear out the risible faculties of a rope yarn; and it is really time that P. C. ought to learn that soundings are of little or no use unless he has a chart to locate them otherwise in avoiding one danger, he may run into another.

As P. C. suggests, he may be placed in the English channel in foggy weather, and on taking a cast of the lead he finds shoal water. Now would he go sailing around, killing all the crabs at the bottom with his lead, and keep people hurrying, chasing, making and taking in sail, finally piling the vessel up on the French coast when he imagines the vessel ought to have been on the Irish coast, or vice versa; or would he sit down calmly at his chart, prick off a position and set the course so as to avoid all dangers, and reach his port of destination in safety and ship-shape. Ah, Patrick, I'm afraid that you have yet much to learn in the tar boiling business.

Soundings are valuable as a means of obtaining a position. Not by any means as a life saving apparatus, and according to the ordinary practice of seamen the lead is thoroughly well attended to, the exceptional case only going to prove the rule in use.

As regards the right and left portion of P. C.'s letters he ought to have good sense enough to let that drop when he considers that all callings have their technicalities, and if he has on several occasions in the past been caught tripping at the wheel, his extra experience may steer him clear of such trouble in the future, especially if he can get hold of a small brass steam steering wheel. Yours truly R. I. P.

CATARRH CURED.

A clergyman, after years of suffering from that loathsome disease, Catarrh, and vainly trying every known remedy, at last found a prescription which completely cured and saved him from death. Any sufferer from this dreadful disease sending a self addressed stamped envelope to professor J. A. Lawrence, 212 East 9th St., New York, will receive the recipe free of charge.

"De man Wat knows it all is allus a-makin' change, a-buyn' ob experience." The man who does not think he "knows t' all" about pumps, steam engines, and boilers, can find out a great deal about them in Grimshaw's Pump Catechism, \$1; Steam Engine Catechism, \$2; or Boiler Catechism, \$2; Preparing for Indication, \$1; by mail post paid. Address Pub. Marine Record, 144 Superior St., Cleveland O.

UNITED STATES ENGINEER OFFICE, 34 WEST Congress street, Detroit, Mich., October 15, 1888. Separate sealed proposals, in triplicate, will be received at this office until two o'clock p. m., November 14, 1888, and then publicly opened: 1. For dredging west channel of Saginaw River along West Bay City, Mich.; 2. For dredging bar at Mouth of Saginaw River, Mich.; 3. For constructing revetment and beam wall and dredging at Carrollton, Saginaw River, Mich. Preference will be given to materials and plant of domestic production or manufacture, conditions of quality and price (import duties included) being equal. The government reserves the right to reject any or all proposals. For further information apply at this office, or at the U. S. Engineer office, Sault Ste. Marie, Mich. O. M. F. O. E., Colonel of Engineers, Bvt. Brig-General, U. S. A.

PROPOSALS FOR SAND, etc. U. S. Engineer Office, Buffalo, N. Y., October 1, 1888. Sealed proposals in triplicate will be received at this office until 11 a. m., eastern standard time, on December 1, 1888, for furnishing sand, pebbles, stone and cement, required in the reconstruction of the breakwater at Buffalo N. Y. All necessary information may be obtained on application to the undersigned. F. A. MAHAN, Captain of Engineers.

UNITED STATES ENGINEER OFFICE, 34 WEST Congress street, Detroit, Mich., October 20, 1888. Sealed proposals for furnishing materials and labor for constructing a pier in front of Fort Brady at Saint Mary's Falls Canal, Michigan, will be received, in triplicate, at this office until 2 p. m., November 19, 1888, and then publicly opened. Preference will be given to materials and plant of domestic production or manufacture, conditions of quality and price (import duties included) being equal. The government reserves the right to reject any or all proposals. For further information apply at this office, or at the U. S. Engineer office, Sault Ste. Marie, Mich. O. M. F. O. E., Colonel of Engineers, Bvt. Brig-General, U. S. A.

Wrecking & Lightering

—AT—

Reduced Prices.

The Steam barge Mary Pringle, with steam pumps, steam hoister, and complete wrecking outfit, will be kept at S. B. Grummond's dock, foot of 1st street, the balance of the season, ready at a moment's notice, day or night.

S. B. Grummond, Owner.

Dixon's Black Lead [OR ROT LEAD]

For Bottoms of Yachts.

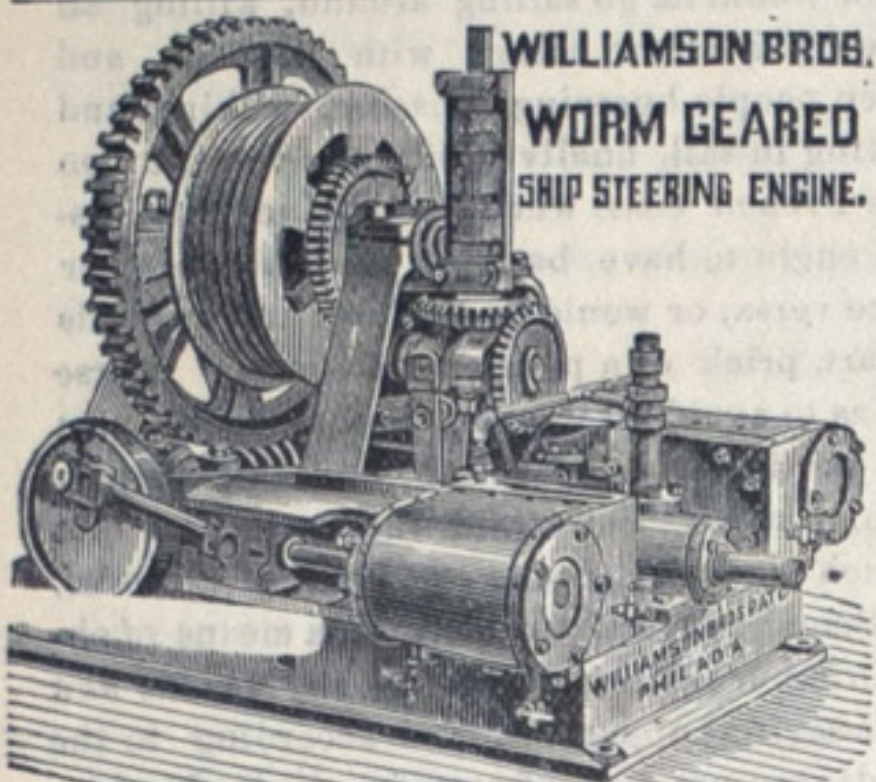
Specially Prepared for the Purpose and Unequaled for Purity and Uniformity of Grain.

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J. New York Office, 68 Reade St.

First-class Merchant Tailoring.

Done in the noblest style, according to monthly new fashion plates; made by none but first-class mechanics and none delivered unless to the entire taste of the Customer, can be procured by Jos. L. Kohn, practical tailor and cutter at the tailoring department of Kohn & Co., 213 Detroit street, second door from corner Pearl known as Boston Dry Goods Store, Cleveland, O.

In the rear of the above Store a fine stock of the latest patterns of Cassimeres, Cloths, Over Coatings, Silk Vestings, can be found and owing to the fact, that this young gentleman of a garment cutter Mr. Jos. L. Kohn does his own cutting, (which alone saves \$30 per week) and has the apartment in the above Store free of any expense it enables him to save the Customers from \$6 to \$10 on every Suit of Clothes. Convince yourself by calling at 213 Detroit street, second door from corner Pearl known as Boston Dry Goods Store of KOHN & CO., Cleveland, O.



WILLIAMSON BROS. WORM GEARED SHIP STEERING ENGINE.

Grummond's Mackinac Line STM'R ATLANTIC.

Captain J. R. Jones.
LEAVES CLEVELAND EVERY FRIDAY AT 5 P. M., CITY TIME,
For Mackinaw, St. Ignace, Cheboygan, Alpena, Oscoda, and way ports. For passage or freight apply to ANDERSON & CO., Agents, Dock ft. of Superior-st. S. B. GRUMMOND, Owner.

SAMUEL McCUTCHEON, STEAMBOAT & ENGINEERS' SUPPLIES

Copper, Brass and Sheet Iron Manufactory.
IRON PIPE AND FITTINGS.
Agent for Davidson's Steam Pumps, Amazon Boiler Compound, and Orme Patent Safety and Relief Valve.

No. 18 Ohio Street, Buffalo, N. Y.

J. C. GOSS, Sail Maker and Rigger,

20 and 22 Woodward Av.,
DETROIT - - MICH
LARGE STORAGE ACCOMMODATION FOR VESSEL CUTFITS.

Scott's New Coast Pilot

Second Edition, Revised and Enlarged,
With new Maps and Illustrations corrected to the opening of Navigation in 1888,
IS SOLD BY

SHIP CHANDLERS
AND BY THE PUBLISHER,
GEORGE SCOTT,
At 162 LARNED ST., E. DETROIT, MICH.

M. M. GLEKLER, MANUFACTURER & DEALER IN Cigars AND Tobacco.

156 River-st., Cleveland, Ohio.
No one should leave port without a box of M. M. Glekler's marine cigars.

FOR SALE.
THE HANDSOME NEW FORE AND AFT SCHOONER, ex W. C. Kimball, built at Manitowoc last winter, outfit all new and complete, 65 feet over all, 17 feet 4 inches beam, 4 feet 9 inches hold. Tonnage 31, 40 Apply to A. D. JOHNSTON, Manitowoc, Wis.

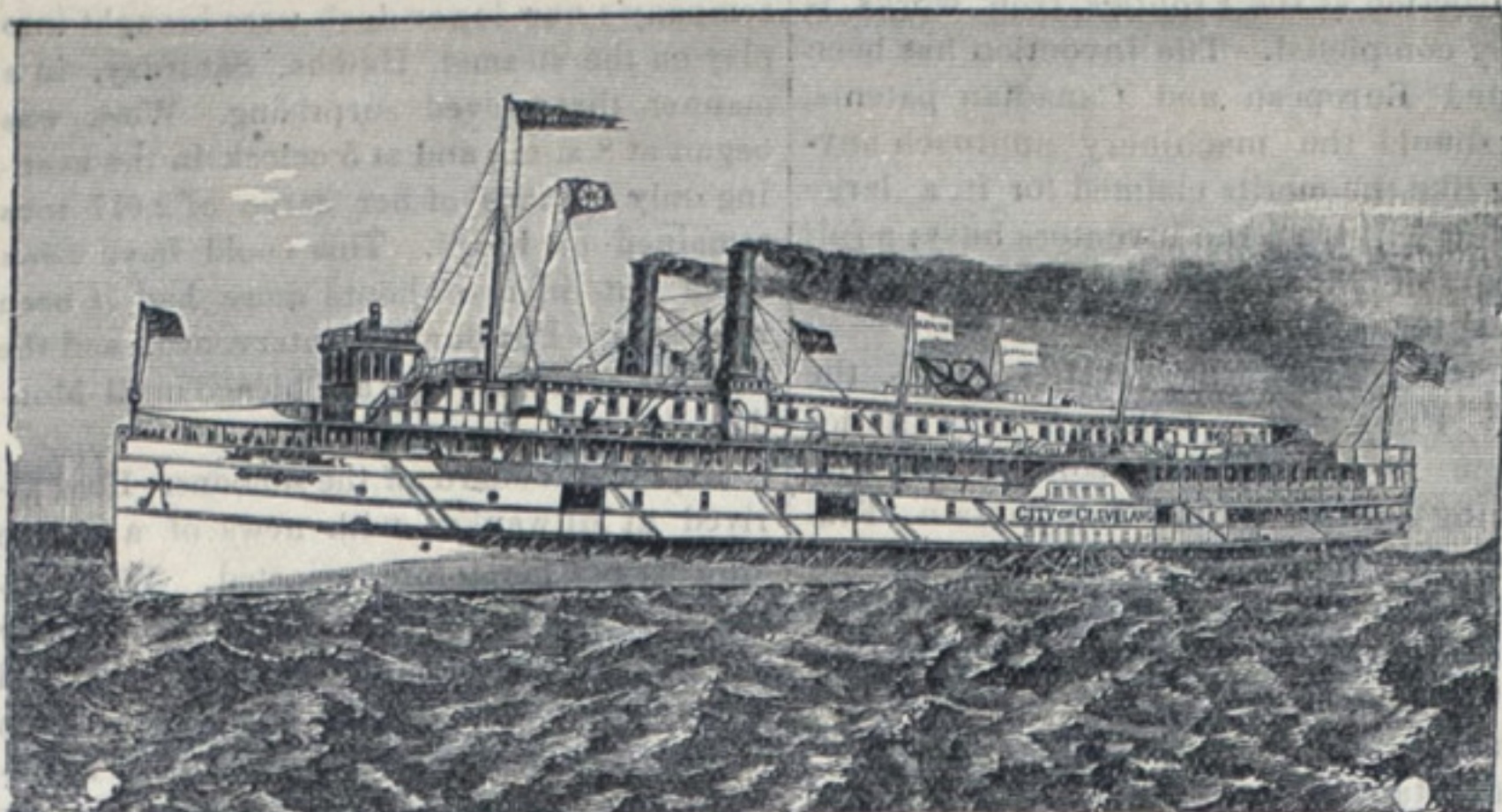
YACHT FOR SALE.
SLOOP YACHT NORDEN, 45 feet water line, 13 1/2 feet beam, in first-class sailing condition, for want of time to run, is offered for sale at a bargain. Address F. W. FINCHER, Pontiac, Mich.

HARBOR TUG FOR SALE.
THE TUG MYRTLE, of Sandusky, Ohio, for sale cheap. Is in first-class condition. For particulars write to FRED GROCH, Sandusky, J.

FOR SALE.
BARGE COIL BRACKET—She carries 2600 M feet of lumber, 420 tons of coal. Had \$500 worth of repairs last season. Put out good. Price \$1,600. Mention this paper. ED. J. KENDALL, Port Huron.

FOR SALE.
A steam barge 125 thousand capacity; will carry 150 passengers, only one year old; a good twelve mile boat in the best possible condition; will be sold reasonable and on easy terms. For further particulars inquire of MARINE RECORD, Cleveland Ohio.

DETROIT DRY DOCK CO.,



CONSTRUCTORS OF EVERY DESCRIPTION OF

Steel, Iron, Composite and Wooden Ships.
IRON SHIP BUILDING WORKS AT WYANDOTTE, MICH
Dry Docks and Repair Yard, ft. of Orleans-st., Detroit, Mich.

S. B. GRUMMOND,

OWNER OF FIRST-CLASS

Tugs for Wrecking, Raft Towing, Etc.
STEAM PUMPS, ROTARY AND WORTHINGTON.

Improved Horizontal Straight Base Hydraulic Jacks.

Sub-marine Divers, Hawsers, Lighters, Etc.

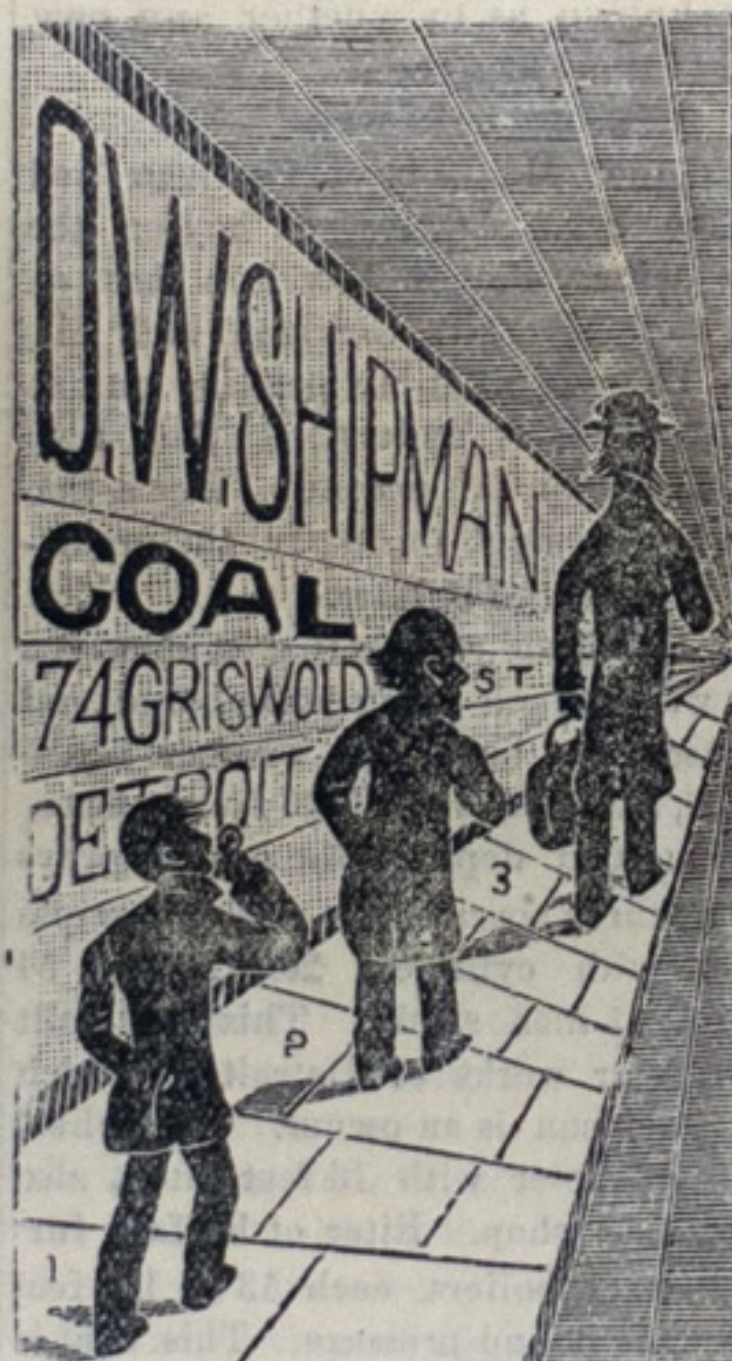
WAREHOUSE AND OFFICE ON DOCK, FOOT OF FIRST ST.,

OWNER OF TUGS

'Winslow,' 'Leviathan,' 'M. Swain,' 'Champion,' } **Detroit, Mich.**
'Wm. A. Moore,' and 'Oswego.'
Also, Steam Barge MARY FRINGLE, with Steam Hoister and Wrecking Outfit on Board.

OFFICE OPEN DAY AND NIGHT. SATISFACTION GUARANTEED.
BRANCH OFFICES at PORT HURON & CHEBOYGAN, MICH
WRECKING TUG

LEVIATHAN, CAPT. M. SWAIN, STATIONED AT CHEBOYGAN
With plenty of Wrecking Material on board and in Warehouse.



A PUZZLE.

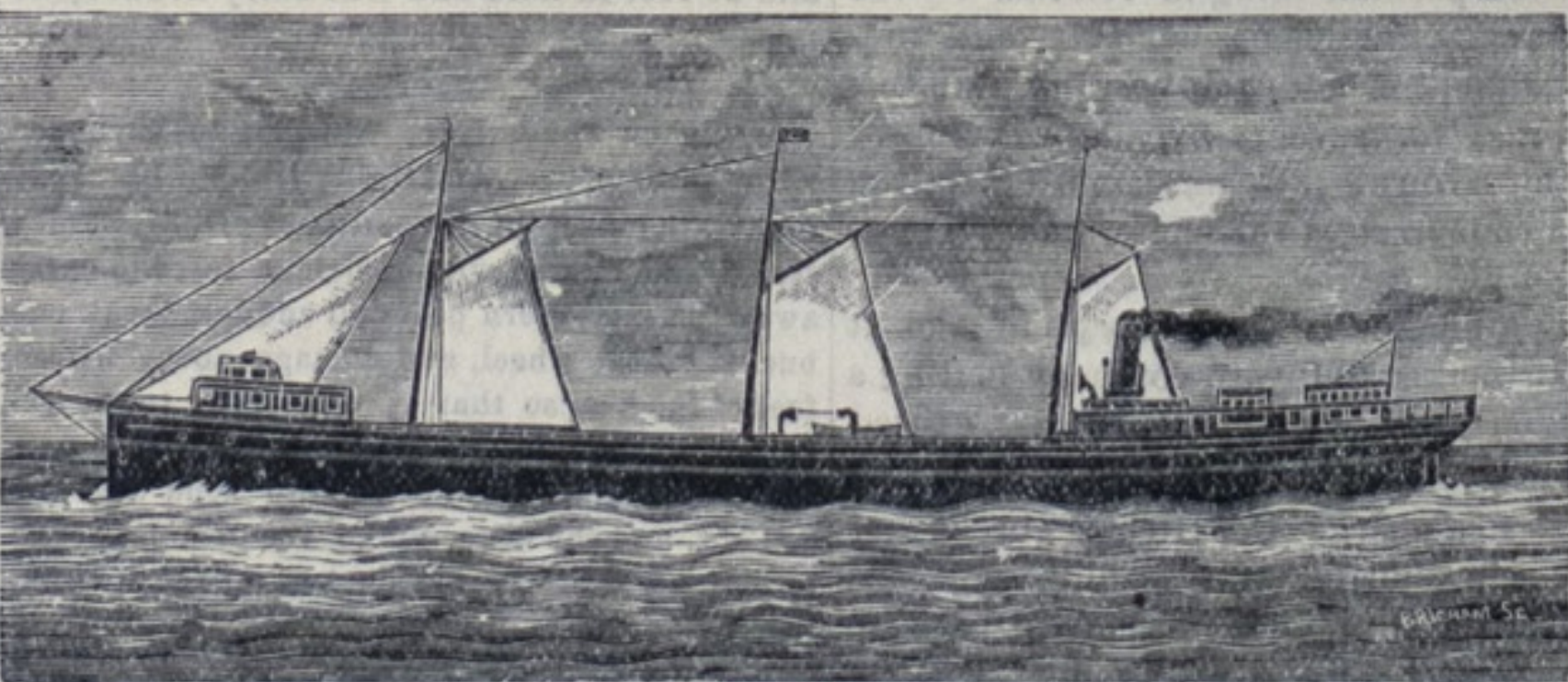
Which Man is the Tallest?

If you measure carefully the figures in this cut you will find that the man who appears the shortest is in reality the tallest. If you will coal your boats at my dock, adjoining S. F. Hodge Iron Works, you will get better dispatch and better COAL than at any other place in the city.

O. W. SHIPMAN,

OFFICE:
Corner Griswold and Larned Sts

H. CHANNON CO.,



Ship Chandlers, Sail Makers and Riggers.
STEAM-BOAT SUPPLIES.
22 to 26 Market-St. near Randolph-St., Chicago.

H. B. & C. B. BURGER, Ship-builders and Contractors.

MANITOWOC DRY DOCK.

Dry Dock will admit Vessels of 1100 tons drawing 12 feet. Have also a set of Boxes in connection with the Ship yard capable of lifting Vessels of 350 tons. A large stock of SPARS CONSTANTLY ON HAND.

VESSELS DOCKED AND REPAIRED ON REASONABLE TERMS.
MANITOWOC, WIS.

J. E. SIMPSON & CO., GENERAL CONTRACTORS.

AND BUILDERS OF

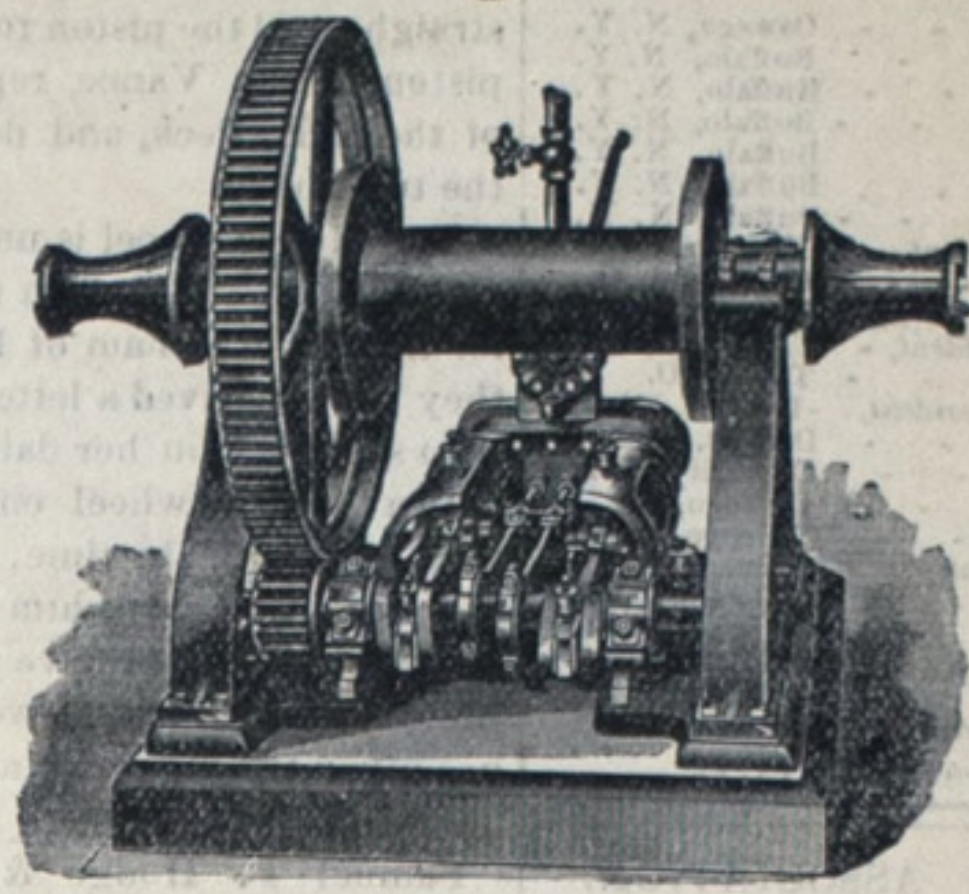
SIMPSON'S PATENT IMPROVED TIMBER DRY DOCK,
NO. 23 BROADWAY, NEW YORK CITY.

EAGLE IRON WORKS,

MANUFACTURERS OF

Duplex, Hoisting & Deck Engines

Specially adapted for Boat
uses, Raising Sail, Hoist-
ing Anchor, Pulling in Tow
Line etc., etc.



Pumps with ten inch Bar-
rels Connected to
Gypsy Spools.

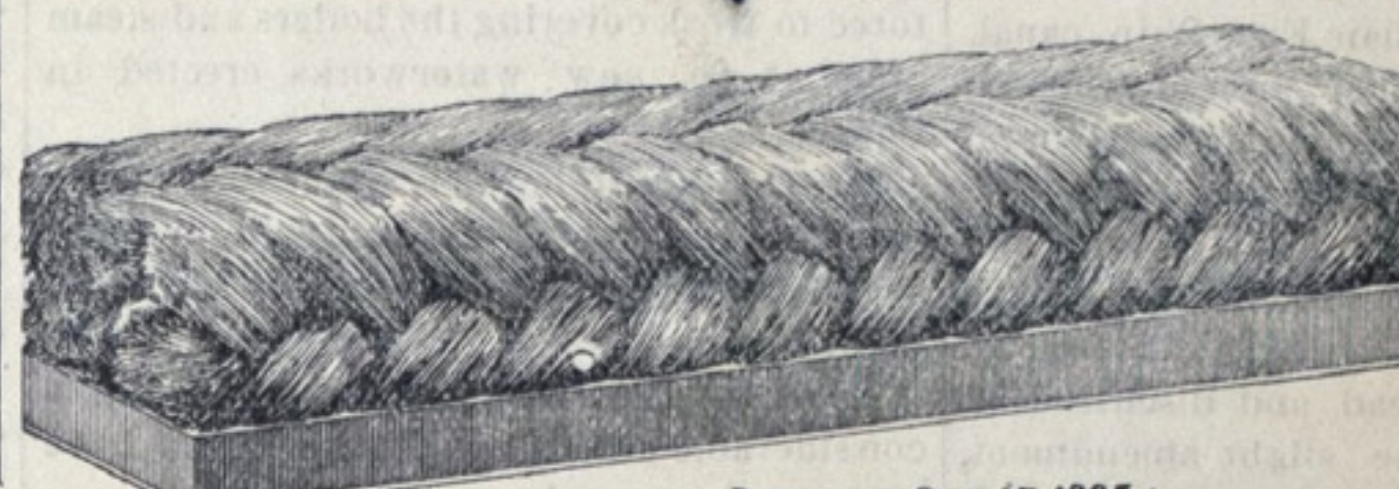
THE SIMPLEST AND BEST OFFERED—SATISFACTION GUARANTEED.

SUBMERGED FLUE BOILERS.

Engines, Boilers and Pumps on Hand for Prompt Shipment
CIRCULARS AND PRICES ON APPLICATION.

Woodbridge, Fifth and Congress-sts, Detroit, Mich.

HULL'S RUBBER STORE



Goodsel's Rubber
Back Flax
Packing, Steam
Packing, Valves
Gaskets, etc.
Rubber Cloth-
ing Boots and
Shoes.

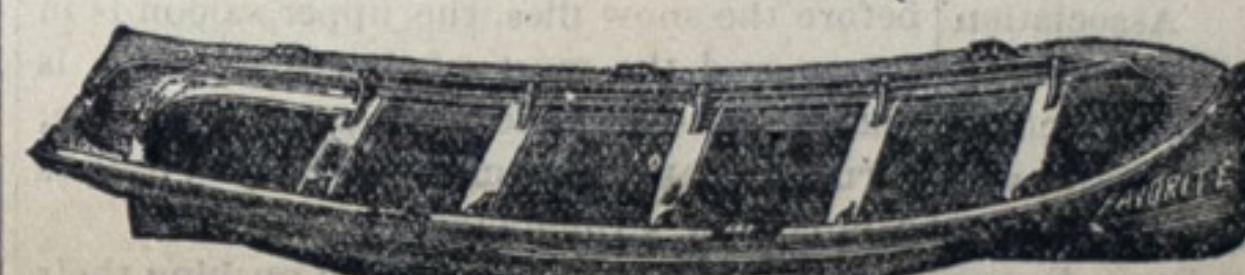
PATENTED OCT. 27, 1885.

SPECIAL GRADES OF WATER AND STEAM HOSE FOR MARINE USE.
E. W. HULL, 237 Superior st., CLEVELAND, O. Send for Price List.

DETROIT BOAT WORKS.

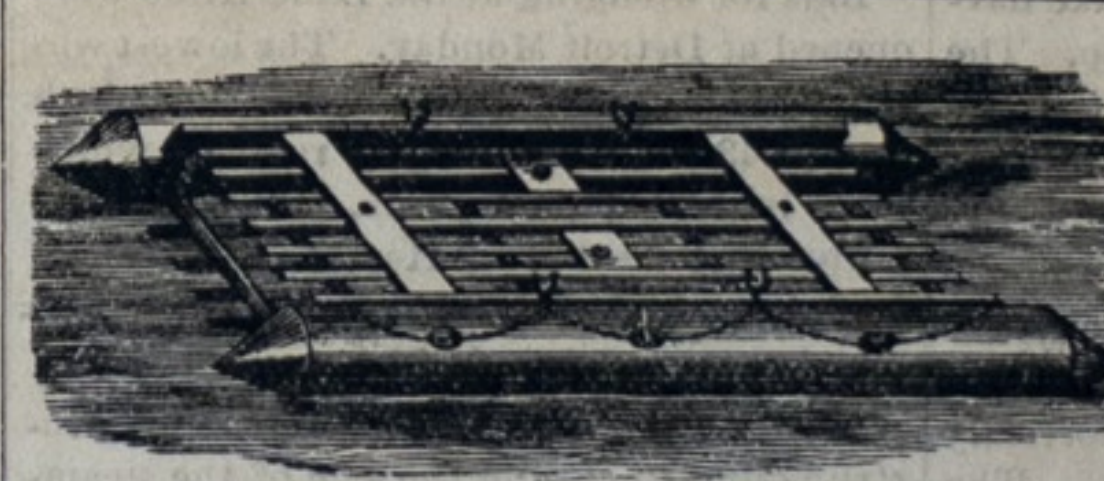
SOLE MANUFACTURERS OF

Clark's Patent Metallic Life Rafts.



HIGHLY INDORSED
BY THE BOARD OF
SUPERVISING IN-
SPECTORS.

Yawls Boats in stock 14, 16, 18, 20 and 22 feet long.
14, 18, 20 and 22 feet long. Life Boats in stock
Steam and Hand Steering Wheels to Order.
Shops ft. of ORLEANS ST., DETROIT MICH.



THOS. DREIN & SON
BUILDERS OF
METALLIC LIFE BOATS
and LIFE RAFTS of all classes
Government and Pleasure Boats
of Wood, Block Cork Life Pre-
servers. Sole manufacturer of Capt.
JONATHAN CONE's celebrated
Patent Life Rafts
Tatnal and Railroad Wilmington Del.

J. W. GROVER & SON,
SHIP CHANDLERS,
SAIL MAKERS AND RIGGERS
IMPORTERS AND WHOLESALE DEALERS IN
Wire Rope, Manila, and Tarred
Cordage, Canvas, Blocks, Oak-
um, Tarp, Pitch, Oars, An-
chors, Chains, etc.
116 & 119 RIVER ST., & 134 & 135 DOCK
CLEVELAND, OHIO.



Travelers' Informa-
tion Bureau.

Ocean, Lake
and Railroad

TICKET AGENTS
224 Bank St.,
CLEVELAND, O

HENRY ESCH, Groceries and Provisions.

Fresh and Salt Meats,
DRY GOODS AND CLOTHING.
Special attention given to vessel supplies.
Corner of Jay and 9th st., Manitowoc, Wis.

SPIEGLE BROS. MARINE SUPPLY STORE

WHOLESALE AND RETAIL
Grocers, Bakers and Ship Supplies;
Fresh & Salt Meat of all kind.
30 & 32 River-st., opposite Detroit Steam boat
Landing, and 184 Broadway. Telephone 112.

Cleveland Block Co.,
MANUFACTURERS OF
Iron Tackle Blocks
TAKING THE PLACE OF
WOODEN BLOCKS FOR
ALL PURPOSES.
159 River St., CLEVELAND, O.

Detour Telephone Line.

direct communication with

WESTERN UNION TELEGRAPH
LINES

and
Frank Perry's Tug Office

SAULT STE MARIE.

Complete towing and wrecking outfit
always ready.

TUG ANDREW J. SMITH

Stationed at Detour. Office open day
and night.

LOUIS LEMON'S TUG LINE.

TUGS:
ONEIDA, C. D. MCKINNON, QUICKSTEP.
River and Harbor

Towing---Raft Tow-
ing a Specialty.

OFFICE 308 ATWATER ST. TELEPHONE 514.
DETROIT, MICH.

The Only Shirt Factory in the City

Where all kinds of Flannel and Cotton Shirts, from the cheapest 50c to the finest Custom made fancy shirt are made to order. And none but our own home made bearing our Trade Mark, can be found constantly in stock ready made, is the Boston Dry Goods Store of Kohn & Co., 213 Detroit street, second door from corner Pearl, Cleveland, O. All our Shirts 54 inch wide, 40 inch long and extra well sewed. We also announce, that we are the only manufacturer, who can procure the genuine U. S. Navy Tunnel, of which we make double and single breasted Sailor Shirts, 3/4 non-shrinkable, fancy pleated Cloth Shirts made in the latest styles, Canadian Flannel Shirts, water proof Shirts and more especially Sea let Medicated Flannel Under Shirts and Drawers. Call also for our Custom made Jean Pants, Overalls, Jumpers, etc., or leave your measure for the same.

Don't forget KOHN & CO., 213 Detroit street, second door from corner Pearl, Cleveland, O.

G. J. STARKEY,
Grocery & Provision Store.
Special Attention Given to Vessel Supplies.
FAIRPORT O

A. S. DeVries,
SHIP AND ORNAMENTAL PAINTER
32 South Water street, Cleveland, O.
Established in 1871. Telephone 210.
Signs, Steering Balls, Liberty Caps, Ornamental Work a specialty in Cabins.

A. J. MORSE & SON,
Diving Apparatus
140 CONGRESS ST. BOSTON.

GEORGE SAAL'S SON,
Copper-smithing of all kinds.
VESSEL WORK A SPECIALTY.
403 and 405 Detroit-st., corner Duane-st.
Telephone 1638. CLEVELAND, O.

River Machine Co.,
[Successor to G. R. GALE,]
171 River St., Cleveland, Ohio,
Are prepared to Manufacture and do General Repairing on Marine Engines and all other Machine Work.
We have also a full line of pulleys and shafting and are prepared to do all kinds of Stone quarry Work.
TEARE, WIGHT & CO.

WARD AND JACKSON,
Shipsmith.
All Kind of Forgings, Bolts and Truss Rods for Building.
49 Main-st Cleveland

GEORGE E. HALLADAY,
Attorney and Proctor in Admiralty.
Marine Business Promptly Attended To.
OFFICE 21 BURL BLOCK, DETROIT, MICHIGAN.

BEESON'S
SAILOR'S HAND BOOK,
And Synopsis of Marine Laws. Every vessel man wants one. For sale by marine clerk at all custom houses. Price 50c. See it.

Lake Shore & Michigan Southern.
Commencing Monday July 13, 1888. The time given in the figures below is the new standard (Nineteenth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No. 4, Fast Limited Express.....	12 55 A.M.	12 55 A.M.
No. 6 N. Y. & Boston Ex.....	1 35 A.M.	1 40 A.M.
No. 8, N. Y. B. & A. Express.....	2 20 A.M.	2 30 A.M.
No. 26, Elyria Accommodation.....	7 45 A.M.	7 45 A.M.
No. 10, Toledo Ac'm via Sandusky.....	11 05 A.M.	11 05 A.M.
No. 10, Toledo Accom via Norwalk.....	11 05 A.M.	11 05 A.M.
No. 24, Buffalo Accommodation.....	7 00 A.M.	7 00 A.M.
No. 10, New York & Boston, "Flyer".....	11 50 A.M.	11 50 A.M.
No. 12, N. Y. & B. Fast Express.....	2 35 P.M.	2 40 P.M.
No. 2, Night Ex via Norwalk.....	9 40 P.M.	10 00 P.M.
No. 22, Night Ex via Sandusky.....	10 40 P.M.	10 40 P.M.
No. 21, Elyria to Elyria only.....	11 25 P.M.	11 25 P.M.
No. 26, Conneaut Accommodation.....	11 25 P.M.	11 25 P.M.
Westward.	Arrive	Depart.
No. 1, Fast Limited Express.....	12 15 A.M.	12 15 A.M.
No. 23, Cleveland Express.....	12 15 A.M.	12 15 A.M.
No. 3, Chicago Express via.....	5 30 A.M.	5 45 A.M.
No. 25, Mich. Accom Norwalk.....	10 40 A.M.	10 40 A.M.
No. 21, Toledo Ex via Norwalk.....	11 20 A.M.	11 20 A.M.
No. 5, St. Louis Ex via Sandusky.....	10 50 A.M.	10 55 A.M.
No. 9, Chl. Pac Ex via Norwalk.....	6 55 P.M.	7 15 P.M.
No. 11, Elyria to Elyria only.....	11 30 P.M.	11 30 P.M.
No. 27, Conneaut Accommodation.....	11 30 P.M.	11 30 P.M.

Sunday train for Nottingham-Depart 9:30 a. m. and 1:00 p. m.; returning, arrive at 9:20 a. m. and 4:45 p. m.
Reference marks—* Daily, † daily, except Sunday, ‡ daily, except Monday.
A local Cleveland and New York sleeper, also sleeper for Boston, and dining car daily on No. 10, leaving Cleveland at 11:50 a. m.; arrive Grand Central depot, New York, 7:30 a. m.
For full information as to trains and connections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.
W. E. GAUL, City Passenger Agent.
J. H. SMITH, Gen'l Pass. Agt., Lake Shore Block.

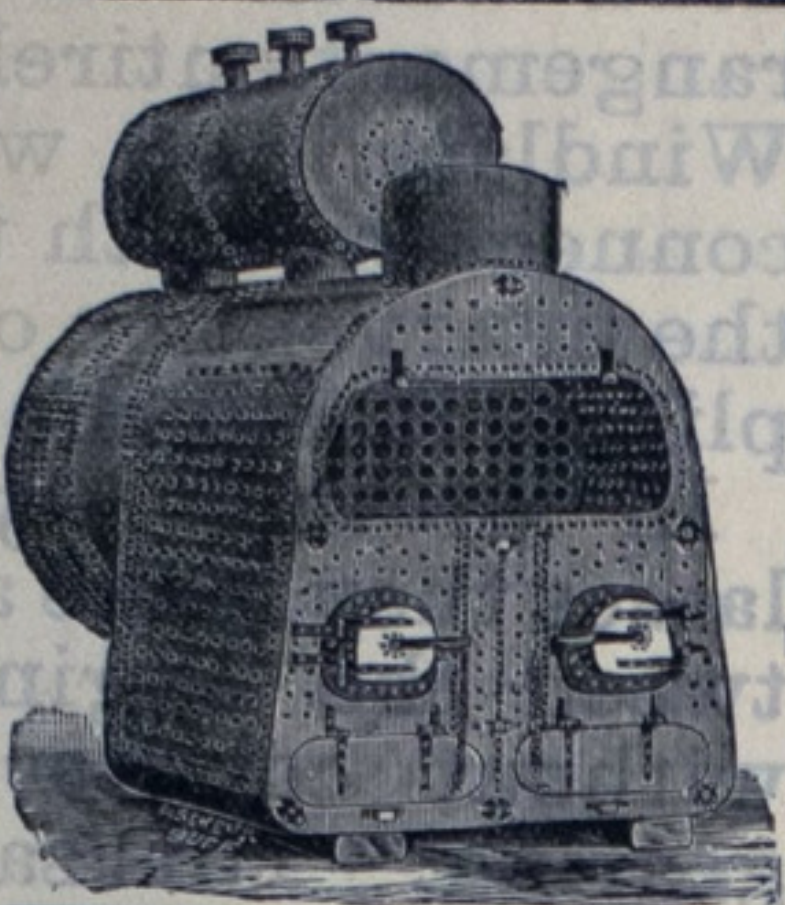
SAMUEL F. HODGE & CO.,

MANUFACTURERS OF

MARINE,

Stationary & Portable Engines, MINING MACHINERY AND PROPELLER WHEELS,

Liverside Iron Works, 314 to 326 Atwater Street, DETROIT, MICH.



EAGLE BOILER WORKS, M. RITER, Prop'r,
Cor. Indiana & Mary St., BUFFALO, N. Y.

MANUFACTURER OF
High and Low Pressure
Marine, Stationary, Portable, Locomotive and Up-right Boilers; also, Salt Pans, Smoke Pipes and Heavy and Light Plate Iron Work of all Descriptions.
REPAIRS PROMPTLY ATTENDED TO.

BOSTON & LOCKPORT BLOCK CO.,

SUCCESSORS TO FAGNALL & LOUD BLOCK CO. and PENFIELD BLOCK CO.
BOSTON, MASS., and LOCKPORT, N. Y.

TACKLE BLOCKS.

Their Specialties are: Self-Lubricating Metaline Blocks; Self-locking Link Snatch Blocks; Self-adjustable Five Roll Roller Bush Blocks; Loud's Patent Non-chokable Diaphragm Pumps will pump Sand, Gravel, etc., without injury to the Pump, having no plunger. Easiest Working Pump in the Market
OUTFITS FOR VESSELS A SPECIALTY.
We make the most durable grade of Blocks to be obtained in the market. Call for our SELF-ADJUSTABLE FIVE ROLL ROLLER BUSHED STAR BRAND BLOCKS and DO AWAY WITH REPAIRS.

Money Saved, Money Gained, Money Well Spent
BY BUYING GOODS DIRECT FROM MANUFACTURERS AT JOBBING PRICES.
W. B. RUDOLF & CO.,
SOLE MANUFACTURERS OF

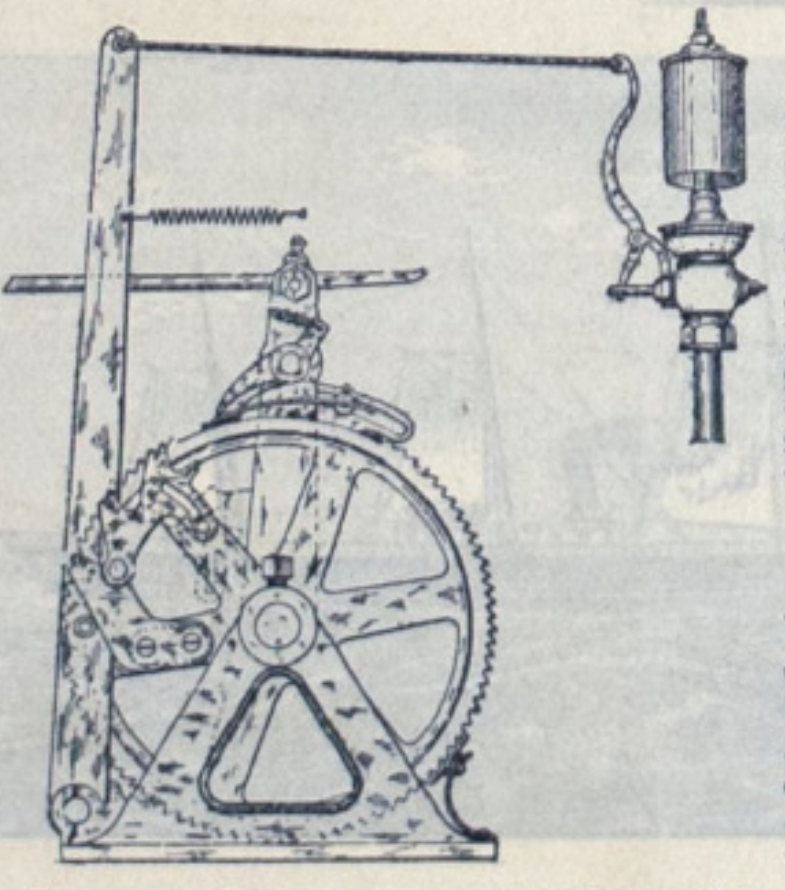
MANUFACTURERS AND DEALERS IN FINE CYLINDER, ENGINE, LARD, BLACK OILS, WATER-PROOF GREASE, PACKING & WIPES, RAILROAD, STEAM-BOAT AND ENGINEERS' SUPPLIES.
WE STAND READY TO HAVE OUR GOODS TESTED AGAINST ALL OTHERS, AND WILL cheerfully supply sample CAN OR BARREL, NOT TO BE PAID FOR UNLESS SATISFACTORY AT THE END OF THE TRIAL; TO BE PAID FOR AT REGULAR RATES WHEN THE GOODS ARE PRONOUNCED SATISFACTORY.

Yearly Contracts a Specialty.

29 South Clinton-st., Chicago, Ill

ARTHUR & BOYLAN,

Steamboats, Tugs, etc., Coaled Day and Night.
DEALERS IN LACKAWANNA ANTHRACITE COAL.
Woks: Ft. West River St., Whisky Island, C. P. R'y. Slip, Government Pier
OFFICE 130 RIVER-ST., CLEVELAND, OHIO.



Chase Fog Whistle Machine
This machine has been placed on the following steamboats during the past year: SPOKANE, WALLULA, KASOTA, CHATELAIN, TOWNE, JR., YAKIMA, MISSOULA, SITKA, PAYETTE, BROWN, R. J. HACKITT, FOREST CITY, SPARTA, HAVANA, VIENNA, OSCAR TOWNSEND, CITY OF CLEVELAND, HENRY CHISHOLM, SUPERIOR, E. B. HALL, M. B. GROVER, J. S. FAY, R. P. HANNEY, SMITH MOORE, CHARLES J. SHEPHERD, IRA H. OWEN, CAMBRIA, CORNICA, J. H. OUTHWAITE, SAMUEL MATHER, R. R. RHODES, COLUMBIA, AURORA, OHIO, WM. EDWARDS, S. E. SHELTON, AUSTRALASIA, BALDWIN, BULGARIA, ROMANIA, J. F. EDDY, HIAWATHA, THOS. ADAMS, A. P. WRIGHT, GRANT STONE, E. P. WILBUR, SOO CITY, E. M. PECK, ROBERT L. FREYER and NORTHERN LIGHT.
To the President and Board of Supervising Inspectors of Steam Vessels:
Your committee to which was referred the "Chase Fog Whistle Machine" beg leave to report: "That we have carefully examined the same and find that it blows at regular intervals, being worked by the engine, thereby insuring regular and continuous blasts for any length of time that may be required and would recommend it or similar device to owners of steam vessels as an additional safeguard to navigation."
H. S. LUBBOCK,
GEO. H. STARBUCK, } Committee.
W. D. ROBINSON,

The manufacturers are the Chase Fog Whistle Machine Co., corner of Elm and Spruce streets, Cleveland, O.



Forest City GEAR STORE
THOMAS LIGGETT, Prop'r.
MANUFACTURER AND JOBBER OF
CIGARS AND TOBACCOS.
259 PEARL STREET
CRESCENT MANUFACTURING COMPANY.

SOLE MANUFACTURERS OF
THE CYCLONE STEAM FLUE CLEANER,
THE CRESCENT STEEL TUBE SCRAPER,
THE CRESCENT TUBE EXPANDER,
THE CRESCENT COMPRESSION GREASE CUP,
THE CRESCENT HACK SAW,
THE CRESCENT LUBRICATING COMPOUND,
THE CRESCENT BOILER COMPOUND.
SUPPLY TRADE SOLICITED
CRESCENT MANUFACTURING Co., 315 Michigan St., Cleveland, Ohio.

TOLEDO, OHIO. MONTPELIER, OHIO. OAR MILLS. NEPTUNE ANCHOR WORKS

DEGRAUW, Aymar & Co.,

MANUFACTURERS AND IMPORTERS OF
CORDAGE, OAKUM, WIRE ROPE, CHAINS, ANCHORS, OARS, BLOCKS, COTTON AND FLAX DUCKS, FLAGS, BUNTINGS, RUSSIA BOLT ROPE,
MARINE HARDWARE AND SHIP-CHANDLERS' GOODS GENERALLY.

Nos. 34 AND 35 SOUTH STREET, NEW YORK.

TESTED CHAINS.

Bradlee & Co., Empire Chain Works
BEACH AND OTIS STS., Philadelphia.
Ship's Cables and Marine Railway Chains.
Chains for Foundry Cranes and Slings.
"D. B. C." Special Crane Chains.
Steel and Iron Dredging, Slope and Mining Chains.

H. G. TROUT, KING IRON WORKS, BUFFALO, N. Y.,

MANUFACTURER OF
Triple Expansion Marine Engines, Three Cylinder and Fore and Aft and Steeple Compound Marine Engines, High and Low Pressure Engines, SECTIONAL PROPELLER WHEELS, PROPELLER, TUG & YACHT WHEELS
These wheels are noted for their extra speed and towing power or a proportionate saving of coal.
PRICES QUOTED ON APPLICATION.

The Hartsfeld Smelting and Refining Co.

CINCINNATI, OHIO.

Smelters and Refiners of old precious metals, auriferous and argentiferous lead and copper ores, cryolite, concentrates, jeweler's sweepings, dross, refuse of white lead paint drippings, &c., &c.
Chemically pure Aluminium by mail \$2 per ounce, ten per cent alloys, 40 cents per pound.
Catalogue of improved smelting and precious metal saving appliances (wet condensing process) sent free.
Assaying and analytical work in all its branches.
Correspondence solicited. Works in Newport, Kentucky, in operation since 1885.

THE AETNA GRATE. G. C. BARNES, Agt.

This Improved Shaking Grate Especially Adapted to Burning Slack.
Glob Iron Works, manufac'rs., Office and Foundry, corner of Elm and Spruce-sts., CLEVELAND, O.

MONTAGUE IRON WORKS, Montague, Mich.,

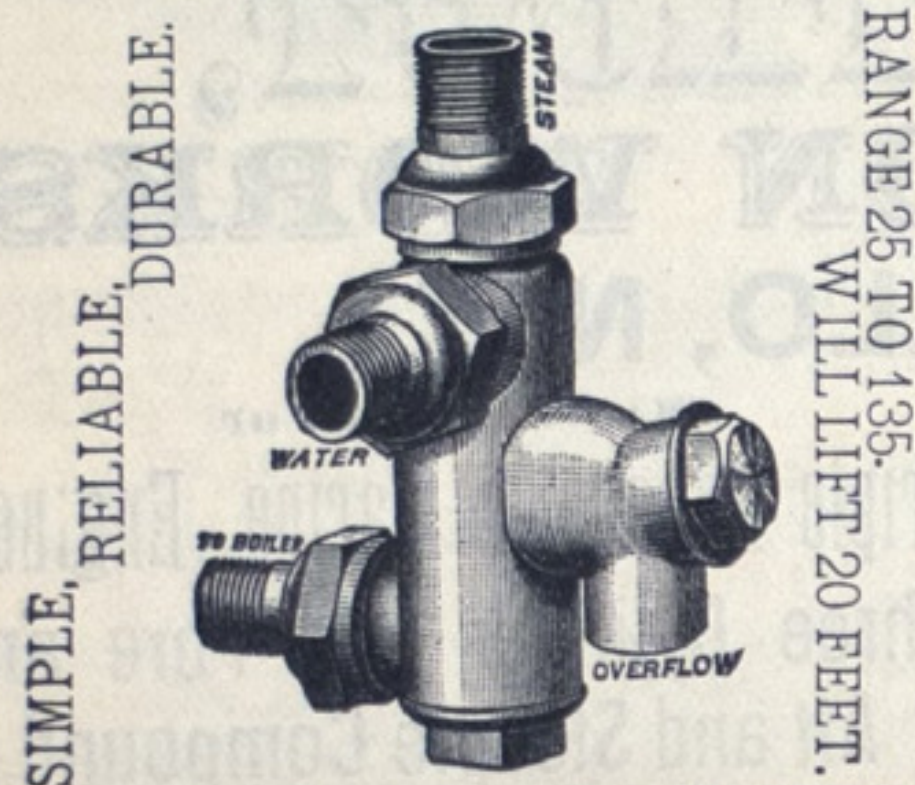
MANUFACTURERS OF
MARINE AND STATIONARY ENGINES AND BOILERS,
Of Every Style and Size,
PROPELLER WHEELS and Heavy Casting
A Specialty. Send for Circular and Prices

NOTICE TO MARINE MEN.
LATE official charts, showing the straight channel, now being dredged, and soundings in bay and river are for sale by
GEO. F. HARDY, Marine Collector,
27 Madison street, Toledo, Ohio

FOR SALE.
STEAM pleasure boat, capacity 60 people, 44 feet over all, 11 feet beam, draws 4 1/2 foot of water. Good machinery. Apply to
D. RANKIN,
on 2, 127 La Salle St., Chicago, Ill.

HOWARD H. BAKER & CO.Ship Chandlers & Sail Makers
WHOLESALE AND RETAIL DEALERS INCordage, Wire Rope, Blocks,
Canvas, Anchors, Chains,
Paints, Oils, Naval Stores.Cylinder, Lard, Signal and Lubricating
Oils a Specialty.
AGENTS FOR THEAmerican Ship Windlass Company
for Lakes Erie and Ontario.Importers of Nautical Instruments of Every
Description.
18, 20, 22, 24, & 26 Terrace.BRANCH STORE foot of Washington street (for-
merly D. S. Austin & Co.)

Buffalo, N. Y.

PENBERTHY'S IMPROVED
Automatic Injectors.
FOR STATIONARY, MARINE, PORTABLE
AND LOCOMOTIVE BOILERS.

A Written Guarantee with each Injector.

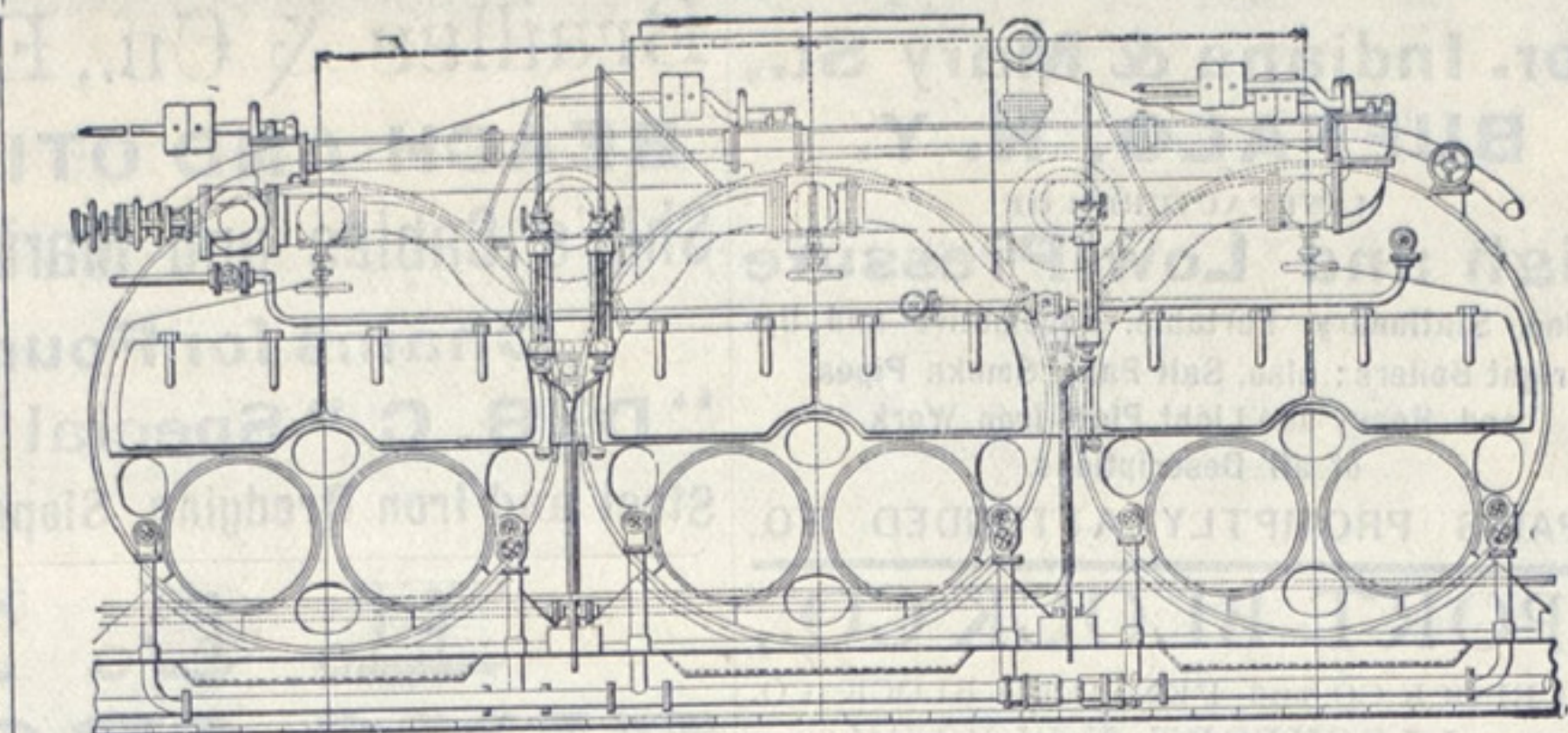
C. H. PRESLEY & CO.,
24 S. WATER ST., CLEVELAND, O.
Telephone No. 2383.**KATZENSTEIN'S**
SELF-ACTING METAL
PACKING
FOR PISTON RODS,
VALVE STEMS, ETC.
Adopted and in use by
the principal Iron Works
and Steamship Compa-
nies within the last eight
years in this and foreign
countries. Also flexible
tubular metallic packing
for slip joints on steam
pipes and for hydraulic
pressure. For full par-
ticulars and references
address
L. KATZENSTEIN & CO.
357 West St., between Leroy and Clarkson-st., N. Y.**CAPT. THOS. WILSON,** who
uses this packing on his Steam-
ers, and **THE MARINE RECORD**
are Agents for Cleveland and the
Lakes.**McKINNON BROS.**
Ashtabula Harbor, O.,
Machinists, Shipsmiths & Steamfitters;
ALSO, DEALERS IN
Engineers' Supplies, Lubricating
and Boring Oil.
BUSINESS PROMPTLY ATTENDED TO.**CAPT. GEO. A. SIMPSON,**
Compass Adjuster,
COMPASSES, BAROMETERS, PATENT LOGS
AND MARINE GLASSES REPAIRED.
Schooners can have their Compasses Ad-
justed for Local Attraction at the time
of repairs by stating how much
they are out on East or West
Courses, and which way it
leads, North or South of above Courses
161 River St., Cleveland, O.**JOHN P. DEVNEY,**
Marine Collector.
Collections Promptly Attended to.
ASHTABULA HARBOR, OHIO.**DETROIT & CLEVELAND**
Steam Navigation Co.,
[Office, on wharf, 23 River Street.]
BETWEEN
CLEVELAND & DETROIT,
MACKINAC ISLAND, ST. IGNACE, AL-
PENA, SAND BEACH, PORT HURON,
CHEBOYGAN, HARRISVILLE,
OSCODA, ST. CLAIR, OAKLAND HOUSE
AND MARINE CITY.For full information, rates, tickets etc. apply to
E. B. WHITCOMB, Gen. Passgr. Agt. Detroit, Mich.
T. F. NEWMAN, Gen. Agt. Cleveland, O.**Travelers' Information Bureau,**
224 Bank St., Cleveland, O.

ESTABLISHED 1847

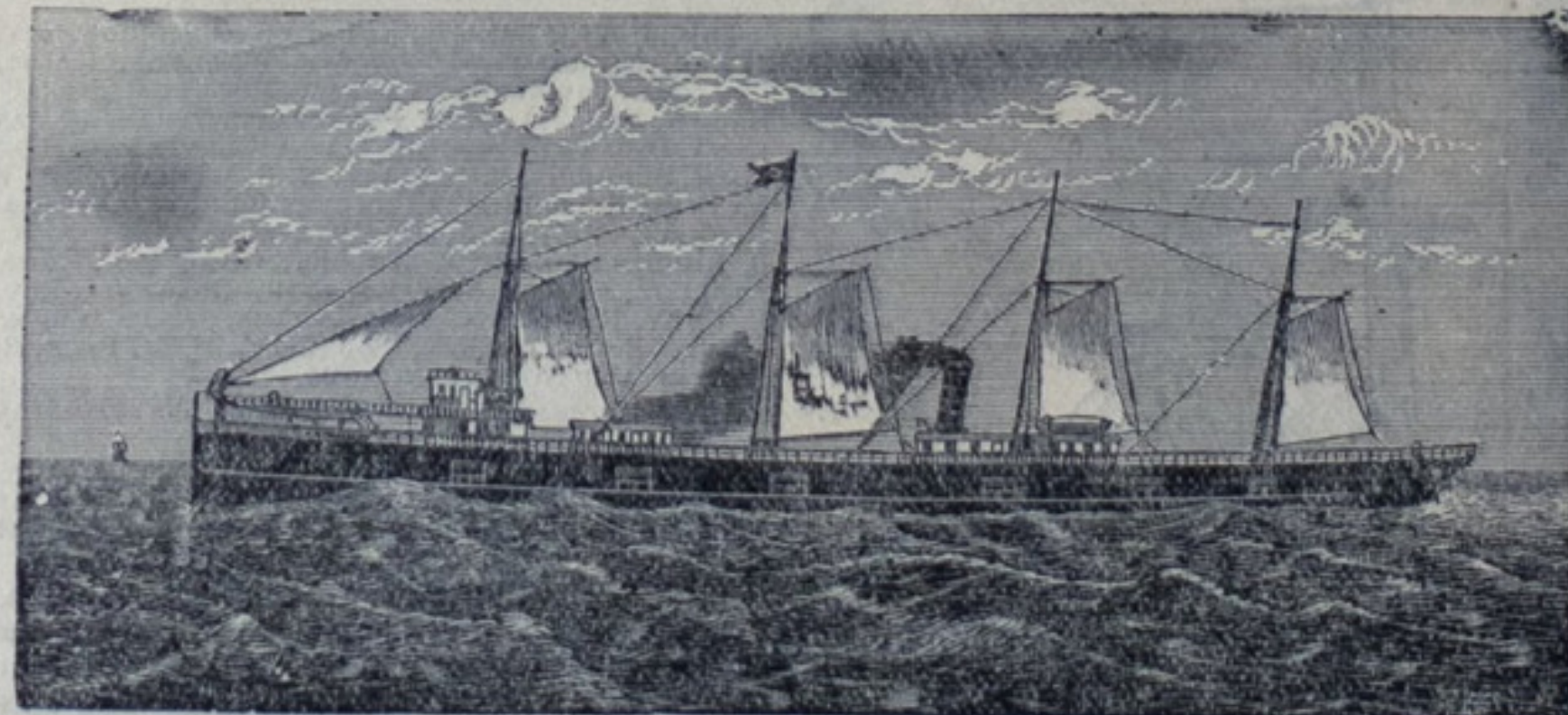
Thomas Quayle's Sons,
SHIP BUILDERS
OFFICE & WORKS CENTRAL WAY

Thos. E. Quayle,
George L. Quayle,
Wm. H. Quayle.

Cleveland, O.

LAKE ERIE BOILER WORKS.The best equipped plant in America for the manufac-
ture of Modern Marine Boilers.**BUFFALO, NEW YORK****URSON, WALTON & CO.**
SELL GOOD ROPE AT
FAIR PRICES
Agents for the American Ship Windlass Co., Williamson Bros. Steam Steerer, Drain Metallic Life Boat,
159 AND 163 R VER-ST., CLEVELAND, O.**H. M. HANNA,**
PRESIDENT.
JOHN F. PANKHURST,
VICE PRESIDENT AND GENERAL MANAGER.**THE GLOBE IRON WORKS COMPANY****BUILDERS OF**
IRON AND STEEL STEAMSHIPS

AND VESSELS OF ALL DIMENSIONS.

Triple Expansion, Compound, High Pressure and Low Pressure
MARINE AND STATIONARY ENGINES,
MARINE, STATIONARY & PORTABLE BOILERS.Blast Furnace and
Rolling Mill Machinery,
Hoisting and Pumping
Engines, Portable Hoist-
ing Engines.Steam Pumps, Steam
and Hand Windlasses,
Winches, and Marine
Appliances of Every
Description.**GENERAL SHEET AND PLATE IRON WORKERS,**
Machinists, Boiler-Makers and Founders.**Builders of**
IRON STEAMSHIPS ONOKO, WILLIAM CHISHOLM, J. H.
DEVEREUX, ETC.
STEEL STEAMERS SPOKANE, CAMBRIA, CHAS. J. SHEP-
FIELD, IRA H. OWEN, CORSICA, CORONA, NORTH-
ERN LIGHT, NORTH WIND, NORTHERN KING,
E. P. WILBUR, S. SWAIN.
PASSENGER STEAMER DARIUS COLE, AND STEAM
YACHT TWILIGHT.
IRON TUGS INTERNATIONAL AND RECORD.Established in 1859.
HENRY LEOPOLD.
Manufacturer and Dealer in all kinds of fine and plain
FURNITURE & UPHOLSTERY,
Mattresses and Vessel Furniture
A SPECIALTY.
Warehouses 798 and 800 Lorain-st., near Ful-
ton. Factory 10 Willet-st.
CLEVELAND, OHIO.**Cleveland Dry Dock Co.,**
Shipbuilding, Drydocking, Re-
pairing and Spar Making.
CLEVELAND, OHIO.**CARLETON & COLE,**
Port Huron Machinery & Supply Depot,
PORT HURON, MICH.
Manufacturers' Agents and Dealers in Boilers,
Engines, Steam and Wrecking pumps,
Engineers Supplies, and Fit-outs
for Steamers and Vessels.
405 and 407 Water st., East.**Thomas Thurston,**
SHIP CARPENTER AND JOINER.
Builder of all kinds of BOATS, YAWLS, ROW,
BOATS and OARS. SAIL and
STEAM YACHTS.
Shop, 365 Atwater Street, DETROIT, MICH.Established in 1857.
AMERICAN SHIP WINDLASS CO.Builders of Steam, Messenger Chain
and Hand Windlasses, Power, Crank
and Steam Capstans, Wharf and Ferry
Drops. Their Capstan Windlasses
have a Power Capstan with a single
head which has power and speed ar-
rangement entirely independent of the
Windlass, and which makes a direct
connection with the Windlass without
the intervention of any gearing to com-
plicate it and increase the friction.In all their styles of Steam Wind-
lasses they make a direct connection be-
tween the engines and the windlass
without counter shafts or additional
gearing. This saves friction and liabil-
ity to break down, and conduces to dur-
ability and ease in operating. They also
have a counterbalance for the engines
and an automatic lubricator for worm
and worm gear, and the engines are
placed together in the most accessible
position. The above improvements and
others too numerous to mention, but
which are familiar to Masters, Owners
and Builders, are covered by Patents
owned exclusively by this Company.
For plans and information
Address,**FRANK S. MANTON, Agent.** P. O. box 53, Providence, R. I.